TABLE 1A

```
                             1      *0*    20        30        40        50     *0 +    70
Streptococcus pneumoniae     MRMIVGHGIDIEELASIESAVTRHEG.FAKRVLTAQEMERFTSLKGRRQIEYLAGRWSAKEAFSKAMGTGI
Escherichia coli               AILGLGTDIVEIARIEAVIARSGDRLARRVLSDNEWAIWK..THHQPVRFLAKRFAVKEAAAKAFGTGI
Klebsiella pneumoniae         MAILGLGTDIVEIARIEAVIARSGDRLARRVLSDHEWSIWE..QHQQPVRFLAKRFAVKEAAGEXLGTGI
Enterococcus faecium           MIKGIGIDAVELSRIKPIVEKQGS.FIQRVLTPNELTLFEKLSTKRQIEFLAGRFACKEAFSKAWGTGI

                                       80   + +       90        100+++  110       120
Streptococcus pneumoniae     .SKLGFQDLEVLNNERGAP.........YFSQAPFSGKIWLSISHTDQFVTASVILEENHES
Escherichia coli             RNGLAFNQFEVFNDELGKPRLRLWGEALKLAEKLGVANMHVTLADERHYACATVIIES
Klebsiella pneumoniae        RNGLAFNQFEVYNDELGKPKLRLWGEANLLAERMGVSAIHVTLADERHYACATVIVES*
Enterococcus faecium         .GKVGLQDIEVLTEKTGAP.........YVANSPHNGKVFVSITHTDTMAIAQIVLESE*
```

TABLE 1B

```
                             I
S. pneumo  AcpS1             MRMIVGHGIDIEELASIESAVTRHEGFAKRVLTAQEMERFTS.....LKGRRQIEYLA
Bacillus subtilis  Sfp             MKIYGIYMDRPLSQEENE.RFMTF.IS...PEKR.EKCRRFYHKEDAHRTLL
                             1
                             54                         +++                   +++
S. pneumo  AcpS1             GRWSAKEAFSKAMGTGISKLGFQDLEVLNNERGAPYFSQAPFSGKIWLSISHTDQFVTASVILEENHES
Bacillus subtilis  Sfp       GDVLVRSVISRQYQ.....LDKSDIRFSTQEYGKPCIPDLP...DAHFNISHSGRWVIGAFDSQ
                             46
                             1      *  *
S. pneumo  AcpS2             MRMIVGHGIDIEELASIESAVTRHEGFAKRV.LTAQEMERFTSLKGRRQIEYLAGRW
Bacillus subtilis  Sfp       .....PIGIDIEKTKPIS.......LEIAKRFFSKTEYSDLLAKDKDEQTDYFYHLW
                             103
                             57 *    +
S. pneumo  SpAcpS2           SAKEAFSKAMGTGISKLGFQDLEVLNNERGAPYFSQAPFSGKIWLSISHTDQFVTASVI.LEENHES
Bacillus subtilis  Sfp       SMKESFIKQEGKGLSLPLDSFSVRLHQ.DGQVSIELPDSHSPCYIKTYEVDPGYKMAVCAAHPDFPEDI
                             148

S. pneumo  SpAcpS2
Bacillus subtilis  Sfp       TMVSYEELL
                             216
```

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Table 2.Crystallographic data

	Inflection, L1	Peak, L2	Remote, L3	Native 1	♠Native 2	♠3'5'-ADP
Data collection						
Energy, eV	12,655.75	12,659.28	12,700.00	12,398.00	12,398.00	12,398.00
Wavelength λ, Å	0.979537	0.979400	0.976259	1.00000	1.00000	1.00000
Number of observations	210,097	205,948	211,823	336,325	423,425	304,946
Number of reflections	54,462	55,080	54,821	59,335	126,451	162,841
Number of unique reflections	8,450	8,508	8,398	14,842	20,366	29,541
Average redundancy	6.4	6.5	6.5	4.0	6.2	5.5
Completeness, %						
All reflections	[a]95/90	95/88	94/88	96/84	94/89	100/99
Reflections with $I > 3\sigma$	94/85	94/86	94/84	81/57	79/53	80/44
$<I/\sigma>$ overall	40/14	41/19	40/18	25.6/4.5	26.5/3.0	31.1/3.8
*R_{merge}, %	5.6/9.2	5.2/8.8	4.7/8.4	4.9/23.0	6.0/30.1	5.3/26.8
Resolution, Å	2.8	2.8	2.8	2.4	2.0	1.9
Refinement						
Protein/Water				2,696/128	2,730/125	2,717/177
Deviation form ideal geometry						
bond length, Å / bond angles, °				0.007/1.169	0.005/1.057	0.010/1.146
dihedrals / imprpers, °				25.956/0.588	23.123/0.610	22.247/0.770
Ramachandran plot statistics						
Residues in most favorite / allowed regions, %				92.0/8.0	91.2/9.0	92.4/7.6
†R_{work}/[1]R_{free}, %				23.6/29.3	20.8/24.7	24.1/27.1

[a] Data after slash sign correspond to outer shell

*$R_{merge} = \Sigma | I - <I>| / \Sigma I$, where I is the intensity of an individual measurement, and $<I>$ is the mean intensity of this reflection

[1] R_{free} is the cross-validation R-value calculated for 5% of the reflections omitted from the refinement.

†$R_{work} = \Sigma |F_o - F_c| / \Sigma |F_o|$, where $|F_o|$ and $|F_c|$ are the observed and calculated structure factor amplitudes respectively.

♠Space group for these data sets is monoclinic C2, the rest of the data sets belong to orthorombic $P2_12_12_1$ space group. Both of them contain one homotrimer per the asymmetric unit

TABLE 3

```
REMARK coordinates from restrained individual B-factor refinement
REMARK refinement resolution: 500.0 - 2.40 A
REMARK starting r= 0.2339 free_r= 0.2899
REMARK final    r= 0.2336 free_r= 0.2950
REMARK B rmsd for bonded mainchain atoms=  0.775  target= 1.5
REMARK B rmsd for bonded sidechain atoms=  0.798  target= 2.0
REMARK B rmsd for angle mainchain atoms=  1.417  target= 2.0
REMARK B rmsd for angle sidechain atoms=  1.333  target= 2.5
REMARK wa= 3.19192
REMARK rweight=0.44902
REMARK target= mlf  steps= 30
REMARK sg= P2(1)2(1)2(1) a= 49.824 b= 59.561 c= 113.738 alpha= 90 beta= 90
gamma= 90
REMARK parameter file 1  : CNX_TOPPAR:protein_rep.param
REMARK parameter file 2  : CNX_TOPPAR:water_rep.param
REMARK parameter file 3  : CNX_TOPPAR:ion.param
REMARK parameter file 4  : so4/so4.param
REMARK molecular structure file: generate.psf
REMARK input coordinates: minimize.pdb
REMARK reflection file= x-ray_data.cv
REMARK ncs= none
REMARK B-correction resolution: 6.0 - 2.40
REMARK initial B-factor correction applied to fobs :
REMARK   B11=    5.613 B22=    4.955 B33= -10.569
REMARK   B12=    0.000 B13=    0.000 B23=    0.000
REMARK B-factor correction applied to coordinate array B:    0.171
REMARK bulk solvent: (Mask) density level= 0.356315 e/A^3, B-factor= 44.7059 A^2
REMARK reflections with |Fobs|/sigma_F < 0.0 rejected
REMARK reflections with |Fobs| > 10000 * rms(Fobs) rejected
REMARK theoretical total number of refl. in resol. range:     13818 ( 100.0 % )
REMARK number of unobserved reflections (no entry or |F|=0):    537 (   3.9 % )
REMARK number of reflections rejected:                            0 (   0.0 % )
REMARK total number of reflections used:                      13281 (  96.1 % )
REMARK number of reflections in working set:                  12603 (  91.2 % )
REMARK number of reflections in test set:                       678 (   4.9 % )
REMARK FILENAME="acps_native_1.pdb"

REMARK Written by CNX VERSION:2000
ATOM      1  CB  MET A1003       6.910  33.184  39.062  1.00 31.51           C
ATOM      2  CG  MET A1003       5.553  33.663  38.598  1.00 33.32           C
ATOM      3  SD  MET A1003       4.818  34.801  39.816  1.00 36.27           S
ATOM      4  CE  MET A1003       5.820  36.290  39.557  1.00 35.34           C
ATOM      5  C   MET A1003       7.655  32.931  36.686  1.00 29.56           C
ATOM      6  O   MET A1003       8.286  33.972  36.449  1.00 29.16           O
ATOM      7  N   MET A1003       9.076  32.131  38.552  1.00 30.78           N
ATOM      8  CA  MET A1003       7.675  32.305  38.074  1.00 30.32           C
ATOM      9  N   ILE A1004       6.935  32.292  35.768  1.00 28.43           N
ATOM     10  CA  ILE A1004       6.826  32.791  34.401  1.00 27.65           C
ATOM     11  CB  ILE A1004       6.307  31.701  33.452  1.00 28.01           C
ATOM     12  CG2 ILE A1004       6.103  32.287  32.051  1.00 27.49           C
ATOM     13  CG1 ILE A1004       7.294  30.525  33.430  1.00 27.59           C
ATOM     14  CD1 ILE A1004       6.890  29.404  32.482  1.00 28.22           C
ATOM     15  C   ILE A1004       5.885  33.992  34.322  1.00 26.94           C
ATOM     16  O   ILE A1004       4.741  33.920  34.765  1.00 26.43           O
ATOM     17  N   VAL A1005       6.380  35.088  33.750  1.00 25.94           N
ATOM     18  CA  VAL A1005       5.595  36.306  33.617  1.00 25.33           C
ATOM     19  CB  VAL A1005       6.211  37.446  34.445  1.00 25.03           C
ATOM     20  CG1 VAL A1005       6.389  36.995  35.882  1.00 25.00           C
ATOM     21  CG2 VAL A1005       7.535  37.878  33.846  1.00 24.19           C
ATOM     22  C   VAL A1005       5.432  36.796  32.173  1.00 25.45           C
ATOM     23  O   VAL A1005       4.982  37.920  31.949  1.00 25.63           O
ATOM     24  N   GLY A1006       5.794  35.964  31.197  1.00 25.11           N
ATOM     25  CA  GLY A1006       5.659  36.371  29.809  1.00 24.32           C
ATOM     26  C   GLY A1006       6.306  35.452  28.786  1.00 23.99           C
ATOM     27  O   GLY A1006       7.413  34.947  28.996  1.00 24.03           O
ATOM     28  N   HIS A1007       5.613  35.232  27.671  1.00 23.11           N
ATOM     29  CA  HIS A1007       6.132  34.386  26.603  1.00 22.22           C
ATOM     30  CB  HIS A1007       5.633  32.943  26.789  1.00 22.37           C
ATOM     31  CG  HIS A1007       6.046  32.010  25.693  1.00 22.55           C
ATOM     32  CD2 HIS A1007       5.331  31.123  24.961  1.00 22.89           C
ATOM     33  ND1 HIS A1007       7.342  31.933  25.226  1.00 22.71           N
ATOM     34  CE1 HIS A1007       7.405  31.044  24.251  1.00 22.72           C
ATOM     35  NE2 HIS A1007       6.198  30.537  24.070  1.00 22.98           N
ATOM     36  C   HIS A1007       5.718  34.925  25.234  1.00 21.79           C
ATOM     37  O   HIS A1007       4.553  35.230  25.007  1.00 21.69           O
ATOM     38  N   GLY A1008       6.682  35.054  24.325  1.00 21.62           N
ATOM     39  CA  GLY A1008       6.380  35.549  22.994  1.00 20.43           C
ATOM     40  C   GLY A1008       7.237  34.888  21.932  1.00 20.87           C
ATOM     41  O   GLY A1008       8.396  34.554  22.171  1.00 20.58           O
ATOM     42  N   ILE A1009       6.655  34.663  20.760  1.00 20.92           N
ATOM     43  CA  ILE A1009       7.389  34.077  19.652  1.00 21.06           C
ATOM     44  CB  ILE A1009       6.911  32.638  19.304  1.00 21.27           C
ATOM     45  CG2 ILE A1009       7.140  31.699  20.485  1.00 21.48           C
ATOM     46  CG1 ILE A1009       5.438  32.654  18.892  1.00 21.01           C
ATOM     47  CD1 ILE A1009       4.967  31.340  18.285  1.00 20.98           C
ATOM     48  C   ILE A1009       7.184  34.951  18.420  1.00 21.74           C
ATOM     49  O   ILE A1009       6.345  35.846  18.404  1.00 20.69           O
ATOM     50  N   ASP A1010       7.971  34.687  17.388  1.00 22.85           N
ATOM     51  CA  ASP A1010       7.857  35.416  16.147  1.00 23.91           C
ATOM     52  CB  ASP A1010       8.456  36.813  16.273  1.00 23.93           C
ATOM     53  CG  ASP A1010       8.300  37.622  14.998  1.00 24.40           C
ATOM     54  OD1 ASP A1010       9.104  37.423  14.050  1.00 24.86           O
ATOM     55  OD2 ASP A1010       7.357  38.442  14.939  1.00 24.36           O
ATOM     56  C   ASP A1010       8.553  34.658  15.041  1.00 24.83           C
ATOM     57  O   ASP A1010       9.586  34.037  15.262  1.00 25.16           O
ATOM     58  N   ILE A1011       7.959  34.687  13.852  1.00 25.82           N
ATOM     59  CA  ILE A1011       8.541  34.021  12.697  1.00 27.04           C
ATOM     60  CB  ILE A1011       7.713  32.780  12.258  1.00 26.91           C
ATOM     61  CG2 ILE A1011       6.274  33.168  11.940  1.00 26.65           C
ATOM     62  CG1 ILE A1011       8.378  32.126  11.048  1.00 27.05           C
ATOM     63  CD1 ILE A1011       7.818  30.757  10.708  1.00 27.44           C
ATOM     64  C   ILE A1011       8.586  35.051  11.580  1.00 27.96           C
ATOM     65  O   ILE A1011       7.652  35.832  11.404  1.00 28.18           O
ATOM     66  N   GLU A1012       9.688  35.070  10.845  1.00 28.86           N
ATOM     67  CA  GLU A1012       9.841  36.023   9.762  1.00 30.03           C
ATOM     68  CB  GLU A1012      10.772  37.161  10.186  1.00 31.54           C
ATOM     69  CG  GLU A1012      10.071  38.292  10.895  1.00 33.83           C
ATOM     70  CD  GLU A1012       9.006  38.913  10.026  1.00 35.22           C
ATOM     71  OE1 GLU A1012       9.352  39.404   8.927  1.00 36.13           O
ATOM     72  OE2 GLU A1012       7.825  38.903  10.438  1.00 36.10           O
ATOM     73  C   GLU A1012      10.375  35.414   8.487  1.00 29.94           C
ATOM     74  O   GLU A1012      11.219  34.526   8.513  1.00 29.44           O
ATOM     75  N   GLU A1013       9.864  35.901   7.367  1.00 30.50           N
ATOM     76  CA  GLU A1013      10.331  35.444   6.069  1.00 30.96           C
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ATOM     77  CB  GLU A1013       9.236  35.587   5.012  1.00 31.74           C
ATOM     78  CG  GLU A1013       9.629  34.951   3.693  1.00 33.86           C
ATOM     79  CD  GLU A1013       8.621  35.179   2.582  1.00 35.01           C
ATOM     80  OE1 GLU A1013       8.792  34.550   1.515  1.00 36.28           O
ATOM     81  OE2 GLU A1013       7.675  35.980   2.762  1.00 35.21           O
ATOM     82  C   GLU A1013      11.498  36.372   5.735  1.00 30.42           C
ATOM     83  O   GLU A1013      11.348  37.594   5.750  1.00 30.06           O
ATOM     84  N   LEU A1014      12.662  35.800   5.457  1.00 30.14           N
ATOM     85  CA  LEU A1014      13.824  36.617   5.140  1.00 30.32           C
ATOM     86  CB  LEU A1014      15.022  35.722   4.814  1.00 30.23           C
ATOM     87  CG  LEU A1014      15.552  34.904   6.000  1.00 30.34           C
ATOM     88  CD1 LEU A1014      16.618  33.929   5.533  1.00 30.59           C
ATOM     89  CD2 LEU A1014      16.117  35.835   7.053  1.00 30.41           C
ATOM     90  C   LEU A1014      13.526  37.563   3.977  1.00 30.65           C
ATOM     91  O   LEU A1014      13.877  38.743   4.023  1.00 30.37           O
ATOM     92  N   ALA A1015      12.857  37.048   2.949  1.00 30.96           N
ATOM     93  CA  ALA A1015      12.519  37.855   1.784  1.00 31.57           C
ATOM     94  CB  ALA A1015      11.683  37.038   0.798  1.00 30.98           C
ATOM     95  C   ALA A1015      11.780  39.131   2.183  1.00 31.93           C
ATOM     96  O   ALA A1015      11.947  40.170   1.544  1.00 31.75           O
ATOM     97  N   SER A1016      10.972  39.055   3.240  1.00 32.40           N
ATOM     98  CA  SER A1016      10.227  40.224   3.714  1.00 33.29           C
ATOM     99  CB  SER A1016       9.264  39.844   4.847  1.00 33.61           C
ATOM    100  OG  SER A1016       8.316  38.883   4.428  1.00 34.88           O
ATOM    101  C   SER A1016      11.194  41.279   4.235  1.00 33.73           C
ATOM    102  O   SER A1016      11.059  42.464   3.937  1.00 33.37           O
ATOM    103  N   ILE A1017      12.156  40.828   5.035  1.00 34.48           N
ATOM    104  CA  ILE A1017      13.167  41.698   5.615  1.00 35.17           C
ATOM    105  CB  ILE A1017      14.041  40.922   6.641  1.00 34.97           C
ATOM    106  CG2 ILE A1017      15.151  41.814   7.173  1.00 34.62           C
ATOM    107  CG1 ILE A1017      13.172  40.436   7.805  1.00 35.03           C
ATOM    108  CD1 ILE A1017      12.550  41.555   8.623  1.00 34.83           C
ATOM    109  C   ILE A1017      14.064  42.266   4.516  1.00 35.70           C
ATOM    110  O   ILE A1017      14.435  43.439   4.555  1.00 35.49           O
ATOM    111  N   GLU A1018      14.414  41.431   3.542  1.00 36.59           N
ATOM    112  CA  GLU A1018      15.260  41.872   2.439  1.00 38.02           C
ATOM    113  CB  GLU A1018      15.595  40.703   1.508  1.00 39.36           C
ATOM    114  CG  GLU A1018      16.768  40.993   0.578  1.00 42.30           C
ATOM    115  CD  GLU A1018      16.928  39.967  -0.532  1.00 44.15           C
ATOM    116  OE1 GLU A1018      16.923  38.748  -0.239  1.00 45.23           O
ATOM    117  OE2 GLU A1018      17.069  40.387  -1.703  1.00 45.34           O
ATOM    118  C   GLU A1018      14.480  42.925   1.658  1.00 38.06           C
ATOM    119  O   GLU A1018      15.026  43.936   1.212  1.00 37.81           O
ATOM    120  N   SER A1019      13.187  42.668   1.509  1.00 37.94           N
ATOM    121  CA  SER A1019      12.297  43.561   0.799  1.00 37.74           C
ATOM    122  CB  SER A1019      10.921  42.906   0.680  1.00 37.89           C
ATOM    123  OG  SER A1019       9.994  43.764   0.044  1.00 38.96           O
ATOM    124  C   SER A1019      12.182  44.916   1.505  1.00 37.72           C
ATOM    125  O   SER A1019      12.074  45.957   0.850  1.00 37.89           O
ATOM    126  N   ALA A1020      12.207  44.902   2.836  1.00 37.14           N
ATOM    127  CA  ALA A1020      12.097  46.129   3.615  1.00 37.01           C
ATOM    128  CB  ALA A1020      11.773  45.800   5.063  1.00 36.69           C
ATOM    129  C   ALA A1020      13.369  46.973   3.542  1.00 37.03           C
ATOM    130  O   ALA A1020      13.309  48.201   3.538  1.00 36.27           O
ATOM    131  N   VAL A1021      14.519  46.309   3.497  1.00 37.47           N
ATOM    132  CA  VAL A1021      15.797  47.007   3.415  1.00 38.34           C
ATOM    133  CB  VAL A1021      16.979  46.047   3.651  1.00 37.99           C
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ATOM    134  CG1 VAL A1021      18.282  46.740   3.316  1.00 38.47           C
ATOM    135  CG2 VAL A1021      16.990  45.585   5.093  1.00 38.14           C
ATOM    136  C   VAL A1021      15.937  47.605   2.025  1.00 38.86           C
ATOM    137  O   VAL A1021      16.345  48.749   1.855  1.00 38.89           O
ATOM    138  N   THR A1022      15.586  46.810   1.029  1.00 39.74           N
ATOM    139  CA  THR A1022      15.670  47.244  -0.350  1.00 40.51           C
ATOM    140  CB  THR A1022      15.220  46.117  -1.300  1.00 40.54           C
ATOM    141  OG1 THR A1022      15.975  44.930  -1.019  1.00 40.47           O
ATOM    142  CG2 THR A1022      15.442  46.525  -2.753  1.00 41.07           C
ATOM    143  C   THR A1022      14.795  48.472  -0.579  1.00 40.85           C
ATOM    144  O   THR A1022      15.227  49.433  -1.204  1.00 41.01           O
ATOM    145  N   ARG A1023      13.577  48.442  -0.048  1.00 41.28           N
ATOM    146  CA  ARG A1023      12.626  49.541  -0.215  1.00 41.51           C
ATOM    147  CB  ARG A1023      11.198  49.003  -0.083  1.00 41.55           C
ATOM    148  CG  ARG A1023      10.804  48.042  -1.201  1.00 42.10           C
ATOM    149  CD  ARG A1023       9.460  47.375  -0.938  1.00 42.16           C
ATOM    150  NE  ARG A1023       8.439  48.328  -0.514  0.05 42.12           N
ATOM    151  CZ  ARG A1023       7.158  48.021  -0.344  0.05 42.14           C
ATOM    152  NH1 ARG A1023       6.734  46.785  -0.567  0.05 42.17           N
ATOM    153  NH2 ARG A1023       6.300  48.947   0.061  0.05 42.16           N
ATOM    154  C   ARG A1023      12.798  50.747   0.710  1.00 41.61           C
ATOM    155  O   ARG A1023      12.396  51.851   0.363  1.00 41.34           O
ATOM    156  N   HIS A1024      13.395  50.544   1.878  1.00 42.27           N
ATOM    157  CA  HIS A1024      13.583  51.636   2.835  1.00 42.70           C
ATOM    158  CB  HIS A1024      12.658  51.445   4.040  0.05 42.61           C
ATOM    159  CG  HIS A1024      11.202  51.471   3.693  0.05 42.54           C
ATOM    160  CD2 HIS A1024      10.233  50.537   3.841  0.05 42.53           C
ATOM    161  ND1 HIS A1024      10.592  52.567   3.121  0.05 42.51           N
ATOM    162  CE1 HIS A1024       9.311  52.307   2.932  0.05 42.49           C
ATOM    163  NE2 HIS A1024       9.067  51.081   3.360  0.05 42.48           N
ATOM    164  C   HIS A1024      15.028  51.727   3.307  1.00 43.14           C
ATOM    165  O   HIS A1024      15.483  50.930   4.131  1.00 43.24           O
ATOM    166  N   GLU A1025      15.732  52.722   2.782  1.00 43.47           N
ATOM    167  CA  GLU A1025      17.139  52.963   3.089  1.00 43.74           C
ATOM    168  CB  GLU A1025      17.596  54.249   2.393  1.00 44.50           C
ATOM    169  CG  GLU A1025      17.396  54.230   0.888  1.00 45.87           C
ATOM    170  CD  GLU A1025      18.031  55.420   0.208  1.00 46.86           C
ATOM    171  OE1 GLU A1025      19.267  55.571   0.320  1.00 47.25           O
ATOM    172  OE2 GLU A1025      17.294  56.201  -0.434  1.00 47.49           O
ATOM    173  C   GLU A1025      17.539  53.030   4.565  1.00 43.28           C
ATOM    174  O   GLU A1025      18.655  52.645   4.912  1.00 43.56           O
ATOM    175  N   GLY A1026      16.649  53.523   5.424  1.00 42.64           N
ATOM    176  CA  GLY A1026      16.972  53.631   6.838  1.00 41.75           C
ATOM    177  C   GLY A1026      16.244  52.645   7.731  1.00 41.40           C
ATOM    178  O   GLY A1026      16.091  52.877   8.931  1.00 41.35           O
ATOM    179  N   PHE A1027      15.801  51.537   7.144  1.00 40.74           N
ATOM    180  CA  PHE A1027      15.077  50.500   7.871  1.00 39.69           C
ATOM    181  CB  PHE A1027      14.695  49.376   6.906  1.00 39.76           C
ATOM    182  CG  PHE A1027      13.976  48.233   7.558  1.00 40.05           C
ATOM    183  CD1 PHE A1027      12.654  48.369   7.978  1.00 40.03           C
ATOM    184  CD2 PHE A1027      14.618  47.012   7.748  1.00 39.83           C
ATOM    185  CE1 PHE A1027      11.982  47.301   8.576  1.00 39.93           C
ATOM    186  CE2 PHE A1027      13.955  45.944   8.344  1.00 39.71           C
ATOM    187  CZ  PHE A1027      12.636  46.089   8.757  1.00 39.70           C
ATOM    188  C   PHE A1027      15.900  49.920   9.020  1.00 39.08           C
ATOM    189  O   PHE A1027      15.470  49.929  10.175  1.00 38.67           O
ATOM    190  N   ALA A1028      17.080  49.409   8.682  1.00 38.48           N
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ATOM     191  CA   ALA A1028       17.980  48.811   9.656  1.00 38.36           C
ATOM     192  CB   ALA A1028       19.242  48.321   8.960  1.00 37.96           C
ATOM     193  C    ALA A1028       18.349  49.784  10.764  1.00 38.25           C
ATOM     194  O    ALA A1028       18.533  49.384  11.907  1.00 38.15           O
ATOM     195  N    LYS A1029       18.456  51.061  10.418  1.00 38.38           N
ATOM     196  CA   LYS A1029       18.823  52.094  11.380  1.00 38.44           C
ATOM     197  CB   LYS A1029       19.154  53.391  10.636  1.00 39.34           C
ATOM     198  CG   LYS A1029       19.997  54.393  11.411  1.00 40.55           C
ATOM     199  CD   LYS A1029       19.248  55.005  12.591  1.00 41.77           C
ATOM     200  CE   LYS A1029       20.043  56.146  13.215  1.00 41.81           C
ATOM     201  NZ   LYS A1029       20.282  57.218  12.208  1.00 42.20           N
ATOM     202  C    LYS A1029       17.703  52.331  12.386  1.00 37.98           C
ATOM     203  O    LYS A1029       17.948  52.731  13.522  1.00 38.26           O
ATOM     204  N    ARG A1030       16.470  52.084  11.969  1.00 37.55           N
ATOM     205  CA   ARG A1030       15.330  52.267  12.856  1.00 37.18           C
ATOM     206  CB   ARG A1030       14.050  52.489  12.040  1.00 38.15           C
ATOM     207  CG   ARG A1030       13.833  53.934  11.573  1.00 39.87           C
ATOM     208  CD   ARG A1030       12.449  54.110  10.937  1.00 40.62           C
ATOM     209  NE   ARG A1030       12.383  53.532   9.598  1.00 41.54           N
ATOM     210  CZ   ARG A1030       12.825  54.142   8.500  1.00 42.11           C
ATOM     211  NH1  ARG A1030       13.359  55.355   8.577  1.00 41.94           N
ATOM     212  NH2  ARG A1030       12.747  53.533   7.323  1.00 42.66           N
ATOM     213  C    ARG A1030       15.145  51.064  13.780  1.00 36.44           C
ATOM     214  O    ARG A1030       14.650  51.202  14.900  1.00 36.62           O
ATOM     215  N    VAL A1031       15.560  49.889  13.313  1.00 35.30           N
ATOM     216  CA   VAL A1031       15.417  48.655  14.080  1.00 34.12           C
ATOM     217  CB   VAL A1031       15.160  47.458  13.145  1.00 34.29           C
ATOM     218  CG1  VAL A1031       14.965  46.190  13.963  1.00 34.93           C
ATOM     219  CG2  VAL A1031       13.949  47.723  12.279  1.00 34.77           C
ATOM     220  C    VAL A1031       16.615  48.300  14.960  1.00 33.18           C
ATOM     221  O    VAL A1031       16.447  47.763  16.057  1.00 33.04           O
ATOM     222  N    LEU A1032       17.818  48.595  14.482  1.00 31.96           N
ATOM     223  CA   LEU A1032       19.026  48.264  15.226  1.00 31.28           C
ATOM     224  CB   LEU A1032       20.081  47.692  14.274  1.00 30.83           C
ATOM     225  CG   LEU A1032       19.665  46.475  13.438  1.00 30.70           C
ATOM     226  CD1  LEU A1032       20.852  46.007  12.608  1.00 30.16           C
ATOM     227  CD2  LEU A1032       19.172  45.351  14.349  1.00 30.17           C
ATOM     228  C    LEU A1032       19.634  49.422  16.005  1.00 30.91           C
ATOM     229  O    LEU A1032       19.534  50.578  15.602  1.00 31.10           O
ATOM     230  N    THR A1033       20.262  49.095  17.129  1.00 30.41           N
ATOM     231  CA   THR A1033       20.918  50.094  17.960  1.00 29.93           C
ATOM     232  CB   THR A1033       21.113  49.605  19.410  1.00 29.26           C
ATOM     233  OG1  THR A1033       22.084  48.552  19.438  1.00 28.24           O
ATOM     234  CG2  THR A1033       19.800  49.097  19.980  1.00 29.31           C
ATOM     235  C    THR A1033       22.291  50.334  17.339  1.00 30.14           C
ATOM     236  O    THR A1033       22.678  49.633  16.405  1.00 29.45           O
ATOM     237  N    ALA A1034       23.018  51.321  17.856  1.00 30.49           N
ATOM     238  CA   ALA A1034       24.344  51.638  17.339  1.00 31.05           C
ATOM     239  CB   ALA A1034       24.987  52.734  18.177  1.00 30.92           C
ATOM     240  C    ALA A1034       25.211  50.388  17.356  1.00 31.28           C
ATOM     241  O    ALA A1034       25.837  50.047  16.357  1.00 31.20           O
ATOM     242  N    LEU A1035       25.241  49.706  18.495  1.00 31.90           N
ATOM     243  CA   LEU A1035       26.030  48.487  18.619  1.00 32.66           C
ATOM     244  CB   LEU A1035       25.878  47.907  20.031  1.00 32.74           C
ATOM     245  CG   LEU A1035       26.464  48.733  21.195  1.00 32.90           C
ATOM     246  CD1  LEU A1035       26.003  48.158  22.529  1.00 32.38           C
ATOM     247  CD2  LEU A1035       27.985  48.737  21.121  1.00 32.56           C
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ATOM    248  C    LEU A1035      25.612  47.454  17.556  1.00 33.36          C
ATOM    249  O    LEU A1035      26.442  46.992  16.769  1.00 33.53          O
ATOM    250  N    GLU A1036      24.328  47.104  17.526  1.00 33.64          N
ATOM    251  CA   GLU A1036      23.822  46.140  16.555  1.00 34.14          C
ATOM    252  CB   GLU A1036      22.299  46.014  16.682  1.00 33.87          C
ATOM    253  CG   GLU A1036      21.818  45.217  17.890  1.00 33.65          C
ATOM    254  CD   GLU A1036      20.341  45.462  18.216  1.00 33.37          C
ATOM    255  OE1  GLU A1036      19.726  44.613  18.895  1.00 32.88          O
ATOM    256  OE2  GLU A1036      19.797  46.509  17.808  1.00 33.01          O
ATOM    257  C    GLU A1036      24.188  46.573  15.137  1.00 34.85          C
ATOM    258  O    GLU A1036      24.526  45.752  14.284  1.00 34.59          O
ATOM    259  N    MET A1037      24.120  47.875  14.893  1.00 35.84          N
ATOM    260  CA   MET A1037      24.436  48.433  13.585  1.00 37.02          C
ATOM    261  CB   MET A1037      24.172  49.936  13.605  1.00 37.11          C
ATOM    262  CG   MET A1037      23.656  50.510  12.294  1.00 38.16          C
ATOM    263  SD   MET A1037      22.148  49.717  11.685  1.00 38.53          S
ATOM    264  CE   MET A1037      22.507  49.661   9.949  1.00 38.71          C
ATOM    265  C    MET A1037      25.899  48.141  13.215  1.00 37.76          C
ATOM    266  O    MET A1037      26.227  47.928  12.044  1.00 37.71          O
ATOM    267  N    GLU A1038      26.774  48.117  14.217  1.00 38.51          N
ATOM    268  CA   GLU A1038      28.183  47.835  13.977  1.00 39.30          C
ATOM    269  CB   GLU A1038      28.989  47.966  15.275  1.00 40.38          C
ATOM    270  CG   GLU A1038      28.963  49.369  15.880  1.00 41.32          C
ATOM    271  CD   GLU A1038      29.874  49.513  17.086  1.00 42.00          C
ATOM    272  OE1  GLU A1038      29.789  50.553  17.771  1.00 42.33          O
ATOM    273  OE2  GLU A1038      30.677  48.592  17.349  1.00 42.44          O
ATOM    274  C    GLU A1038      28.349  46.436  13.395  1.00 39.50          C
ATOM    275  O    GLU A1038      28.932  46.272  12.327  1.00 40.05          O
ATOM    276  N    ARG A1039      27.837  45.423  14.087  1.00 39.36          N
ATOM    277  CA   ARG A1039      27.945  44.063  13.577  1.00 39.25          C
ATOM    278  CB   ARG A1039      27.347  43.053  14.563  1.00 39.62          C
ATOM    279  CG   ARG A1039      27.395  41.632  14.025  1.00 40.25          C
ATOM    280  CD   ARG A1039      27.177  40.585  15.089  1.00 40.85          C
ATOM    281  NE   ARG A1039      27.251  39.243  14.516  1.00 41.68          N
ATOM    282  CZ   ARG A1039      28.314  38.756  13.879  1.00 42.00          C
ATOM    283  NH1  ARG A1039      28.289  37.523  13.387  1.00 42.01          N
ATOM    284  NH2  ARG A1039      29.408  39.496  13.735  1.00 41.92          N
ATOM    285  C    ARG A1039      27.241  43.938  12.228  1.00 39.03          C
ATOM    286  O    ARG A1039      27.774  43.347  11.291  1.00 38.64          O
ATOM    287  N    PHE A1040      26.040  44.502  12.136  1.00 39.10          N
ATOM    288  CA   PHE A1040      25.255  44.464  10.901  1.00 39.18          C
ATOM    289  CB   PHE A1040      24.030  45.369  11.036  1.00 38.05          C
ATOM    290  CG   PHE A1040      23.268  45.560   9.754  1.00 37.43          C
ATOM    291  CD1  PHE A1040      22.443  44.557   9.258  1.00 37.16          C
ATOM    292  CD2  PHE A1040      23.365  46.752   9.045  1.00 37.16          C
ATOM    293  CE1  PHE A1040      21.722  44.742   8.074  1.00 36.76          C
ATOM    294  CE2  PHE A1040      22.649  46.946   7.863  1.00 36.76          C
ATOM    295  CZ   PHE A1040      21.825  45.936   7.379  1.00 36.61          C
ATOM    296  C    PHE A1040      26.063  44.910   9.682  1.00 39.84          C
ATOM    297  O    PHE A1040      26.157  44.190   8.682  1.00 39.67          O
ATOM    298  N    THR A1041      26.643  46.104   9.774  1.00 40.57          N
ATOM    299  CA   THR A1041      27.415  46.668   8.676  1.00 41.24          C
ATOM    300  CB   THR A1041      27.726  48.138   8.938  1.00 41.14          C
ATOM    301  OG1  THR A1041      28.364  48.272  10.212  1.00 41.93          O
ATOM    302  CG2  THR A1041      26.446  48.948   8.933  1.00 40.95          C
ATOM    303  C    THR A1041      28.708  45.931   8.353  1.00 41.72          C
ATOM    304  O    THR A1041      29.251  46.080   7.259  1.00 41.99          O
ATOM    305  N   SER A1042      29.198  45.133   9.297  1.00 42.15           N
ATOM    306  CA  SER A1042      30.419  44.367   9.078  1.00 42.65           C
ATOM    307  CB  SER A1042      31.106  44.057  10.407  1.00 42.64           C
ATOM    308  OG  SER A1042      30.642  42.828  10.934  1.00 43.03           O
ATOM    309  C   SER A1042      30.066  43.050   8.381  1.00 43.22           C
ATOM    310  O   SER A1042      30.937  42.218   8.118  1.00 43.14           O
ATOM    311  N   LEU A1043      28.781  42.869   8.095  1.00 43.80           N
ATOM    312  CA  LEU A1043      28.298  41.660   7.439  1.00 44.32           C
ATOM    313  CB  LEU A1043      27.151  41.040   8.247  1.00 43.98           C
ATOM    314  CG  LEU A1043      27.491  40.512   9.642  1.00 43.88           C
ATOM    315  CD1 LEU A1043      26.219  40.165  10.388  1.00 43.76           C
ATOM    316  CD2 LEU A1043      28.383  39.294   9.521  1.00 44.03           C
ATOM    317  C   LEU A1043      27.821  41.973   6.026  1.00 44.90           C
ATOM    318  O   LEU A1043      27.448  43.110   5.722  1.00 44.88           O
ATOM    319  N   LYS A1044      27.827  40.950   5.174  1.00 45.38           N
ATOM    320  CA  LYS A1044      27.412  41.088   3.782  1.00 45.95           C
ATOM    321  CB  LYS A1044      28.556  40.673   2.856  1.00 46.91           C
ATOM    322  CG  LYS A1044      28.976  39.209   3.060  1.00 47.97           C
ATOM    323  CD  LYS A1044      29.803  38.669   1.896  1.00 48.98           C
ATOM    324  CE  LYS A1044      30.319  37.260   2.187  1.00 49.35           C
ATOM    325  NZ  LYS A1044      29.216  36.313   2.505  1.00 49.24           N
ATOM    326  C   LYS A1044      26.202  40.217   3.457  1.00 45.75           C
ATOM    327  O   LYS A1044      25.779  39.391   4.266  1.00 46.06           O
ATOM    328  N   GLY A1045      25.674  40.416   2.252  1.00 45.39           N
ATOM    329  CA  GLY A1045      24.538  39.663   1.743  1.00 44.96           C
ATOM    330  C   GLY A1045      23.577  38.960   2.685  1.00 44.52           C
ATOM    331  O   GLY A1045      23.147  39.520   3.692  1.00 44.43           O
ATOM    332  N   ARG A1046      23.231  37.726   2.333  1.00 44.21           N
ATOM    333  CA  ARG A1046      22.297  36.917   3.112  1.00 43.89           C
ATOM    334  CB  ARG A1046      22.304  35.474   2.589  1.00 44.58           C
ATOM    335  CG  ARG A1046      21.962  35.399   1.099  1.00 46.46           C
ATOM    336  CD  ARG A1046      21.891  33.977   0.547  1.00 47.97           C
ATOM    337  NE  ARG A1046      20.698  33.253   0.979  1.00 49.25           N
ATOM    338  CZ  ARG A1046      20.360  32.043   0.538  1.00 49.83           C
ATOM    339  NH1 ARG A1046      19.257  31.454   0.983  1.00 49.98           N
ATOM    340  NH2 ARG A1046      21.123  31.420  -0.352  1.00 49.87           N
ATOM    341  C   ARG A1046      22.572  36.951   4.609  1.00 43.05           C
ATOM    342  O   ARG A1046      21.657  37.167   5.402  1.00 42.92           O
ATOM    343  N   ARG A1047      23.830  36.751   4.994  1.00 42.04           N
ATOM    344  CA  ARG A1047      24.212  36.775   6.401  1.00 40.92           C
ATOM    345  CB  ARG A1047      25.726  36.592   6.553  1.00 41.86           C
ATOM    346  CG  ARG A1047      26.196  35.146   6.581  1.00 43.21           C
ATOM    347  CD  ARG A1047      27.613  35.070   7.134  1.00 44.61           C
ATOM    348  NE  ARG A1047      28.023  33.709   7.475  1.00 45.70           N
ATOM    349  CZ  ARG A1047      28.346  32.773   6.588  1.00 46.26           C
ATOM    350  NH1 ARG A1047      28.705  31.565   7.004  1.00 46.85           N
ATOM    351  NH2 ARG A1047      28.318  33.042   5.289  1.00 46.67           N
ATOM    352  C   ARG A1047      23.800  38.082   7.074  1.00 39.44           C
ATOM    353  O   ARG A1047      23.397  38.100   8.236  1.00 38.89           O
ATOM    354  N   GLN A1048      23.914  39.178   6.338  1.00 37.81           N
ATOM    355  CA  GLN A1048      23.550  40.475   6.871  1.00 36.41           C
ATOM    356  CB  GLN A1048      24.011  41.576   5.920  1.00 36.74           C
ATOM    357  CG  GLN A1048      24.106  42.940   6.565  1.00 37.57           C
ATOM    358  CD  GLN A1048      24.476  44.024   5.578  1.00 38.09           C
ATOM    359  OE1 GLN A1048      24.860  45.132   5.965  1.00 38.67           O
ATOM    360  NE2 GLN A1048      24.351  43.717   4.295  1.00 38.03           N
ATOM    361  C   GLN A1048      22.037  40.561   7.074  1.00 35.21           C
ATOM    362  O   GLN A1048      21.567  41.201   8.015  1.00 34.68           O
ATOM    363  N   ILE A1049      21.279  39.919   6.189  1.00 33.75           N
ATOM    364  CA  ILE A1049      19.826  39.934   6.295  1.00 32.76           C
ATOM    365  CB  ILE A1049      19.146  39.436   4.987  1.00 32.88           C
ATOM    366  CG2 ILE A1049      17.628  39.437   5.153  1.00 32.63           C
ATOM    367  CG1 ILE A1049      19.536  40.333   3.808  1.00 32.63           C
ATOM    368  CD1 ILE A1049      19.070  41.776   3.930  1.00 32.59           C
ATOM    369  C   ILE A1049      19.366  39.062   7.466  1.00 31.99           C
ATOM    370  O   ILE A1049      18.480  39.456   8.223  1.00 31.76           O
ATOM    371  N   GLU A1050      19.964  37.883   7.611  1.00 31.37           N
ATOM    372  CA  GLU A1050      19.610  36.982   8.707  1.00 31.34           C
ATOM    373  CB  GLU A1050      20.362  35.648   8.591  1.00 32.61           C
ATOM    374  CG  GLU A1050      20.706  34.980   9.944  1.00 36.11           C
ATOM    375  CD  GLU A1050      19.482  34.642  10.819  1.00 37.78           C
ATOM    376  OE1 GLU A1050      19.674  34.340  12.024  1.00 39.05           O
ATOM    377  OE2 GLU A1050      18.339  34.671  10.311  1.00 38.44           O
ATOM    378  C   GLU A1050      19.929  37.642  10.047  1.00 30.27           C
ATOM    379  O   GLU A1050      19.172  37.494  11.014  1.00 30.09           O
ATOM    380  N   TYR A1051      21.041  38.372  10.107  1.00 28.49           N
ATOM    381  CA  TYR A1051      21.398  39.040  11.343  1.00 27.23           C
ATOM    382  CB  TYR A1051      22.747  39.750  11.244  1.00 26.82           C
ATOM    383  CG  TYR A1051      23.032  40.565  12.484  1.00 26.72           C
ATOM    384  CD1 TYR A1051      22.657  41.906  12.569  1.00 26.89           C
ATOM    385  CE1 TYR A1051      22.830  42.627  13.750  1.00 26.37           C
ATOM    386  CD2 TYR A1051      23.590  39.970  13.612  1.00 26.66           C
ATOM    387  CE2 TYR A1051      23.761  40.676  14.786  1.00 26.28           C
ATOM    388  CZ  TYR A1051      23.381  42.000  14.852  1.00 26.29           C
ATOM    389  OH  TYR A1051      23.554  42.688  16.031  1.00 26.92           O
ATOM    390  C   TYR A1051      20.332  40.069  11.670  1.00 26.31           C
ATOM    391  O   TYR A1051      19.893  40.189  12.811  1.00 25.81           O
ATOM    392  N   LEU A1052      19.927  40.812  10.650  1.00 25.22           N
ATOM    393  CA  LEU A1052      18.923  41.845  10.809  1.00 24.40           C
ATOM    394  CB  LEU A1052      18.854  42.685   9.532  1.00 24.44           C
ATOM    395  CG  LEU A1052      17.719  43.703   9.465  1.00 25.24           C
ATOM    396  CD1 LEU A1052      17.904  44.780  10.533  1.00 24.85           C
ATOM    397  CD2 LEU A1052      17.692  44.314   8.081  1.00 25.55           C
ATOM    398  C   LEU A1052      17.551  41.242  11.126  1.00 23.78           C
ATOM    399  O   LEU A1052      16.808  41.771  11.957  1.00 23.28           O
ATOM    400  N   ALA A1053      17.227  40.134  10.459  1.00 22.87           N
ATOM    401  CA  ALA A1053      15.948  39.459  10.655  1.00 22.13           C
ATOM    402  CB  ALA A1053      15.780  38.354   9.619  1.00 21.79           C
ATOM    403  C   ALA A1053      15.858  38.875  12.066  1.00 21.81           C
ATOM    404  O   ALA A1053      14.841  39.022  12.748  1.00 21.24           O
ATOM    405  N   GLY A1054      16.932  38.215  12.497  1.00 21.35           N
ATOM    406  CA  GLY A1054      16.953  37.624  13.819  1.00 20.95           C
ATOM    407  C   GLY A1054      16.707  38.649  14.910  1.00 20.80           C
ATOM    408  O   GLY A1054      15.890  38.428  15.803  1.00 20.64           O
ATOM    409  N   ARG A1055      17.419  39.769  14.845  1.00 20.73           N
ATOM    410  CA  ARG A1055      17.255  40.822  15.843  1.00 21.15           C
ATOM    411  CB  ARG A1055      18.254  41.959  15.586  1.00 20.76           C
ATOM    412  CG  ARG A1055      19.514  41.893  16.444  1.00 20.45           C
ATOM    413  CD  ARG A1055      20.238  40.562  16.281  1.00 20.93           C
ATOM    414  NE  ARG A1055      21.323  40.413  17.249  1.00 20.92           N
ATOM    415  CZ  ARG A1055      22.109  39.344  17.337  1.00 21.08           C
ATOM    416  NH1 ARG A1055      21.937  38.314  16.515  1.00 21.54           N
ATOM    417  NH2 ARG A1055      23.073  39.308  18.246  1.00 20.48           N
ATOM    418  C   ARG A1055      15.822  41.355  15.834  1.00 20.82           C
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ATOM     419  O    ARG A1055       15.235  41.597  16.884  1.00 19.96           O
ATOM     420  N    TRP A1056       15.272  41.535  14.638  1.00 21.33           N
ATOM     421  CA   TRP A1056       13.907  42.018  14.481  1.00 21.83           C
ATOM     422  CB   TRP A1056       13.597  42.252  12.995  1.00 23.26           C
ATOM     423  CG   TRP A1056       12.117  42.342  12.688  1.00 25.60           C
ATOM     424  CD2  TRP A1056       11.384  43.518  12.326  1.00 26.69           C
ATOM     425  CE2  TRP A1056       10.026  43.140  12.186  1.00 27.05           C
ATOM     426  CE3  TRP A1056       11.741  44.852  12.106  1.00 27.71           C
ATOM     427  CD1  TRP A1056       11.199  41.324  12.745  1.00 26.25           C
ATOM     428  NE1  TRP A1056        9.942  41.798  12.448  1.00 27.38           N
ATOM     429  CZ2  TRP A1056        9.025  44.048  11.839  1.00 28.05           C
ATOM     430  CZ3  TRP A1056       10.741  45.763  11.757  1.00 29.41           C
ATOM     431  CH2  TRP A1056        9.397  45.353  11.628  1.00 28.81           C
ATOM     432  C    TRP A1056       12.956  40.973  15.059  1.00 21.40           C
ATOM     433  O    TRP A1056       11.999  41.299  15.754  1.00 21.32           O
ATOM     434  N    SER A1057       13.233  39.714  14.752  1.00 20.70           N
ATOM     435  CA   SER A1057       12.429  38.605  15.231  1.00 20.76           C
ATOM     436  CB   SER A1057       12.956  37.293  14.632  1.00 21.29           C
ATOM     437  OG   SER A1057       12.032  36.234  14.815  1.00 23.54           O
ATOM     438  C    SER A1057       12.498  38.559  16.760  1.00 20.11           C
ATOM     439  O    SER A1057       11.484  38.361  17.438  1.00 19.93           O
ATOM     440  N    ALA A1058       13.698  38.750  17.303  1.00 19.35           N
ATOM     441  CA   ALA A1058       13.881  38.727  18.751  1.00 18.89           C
ATOM     442  CB   ALA A1058       15.373  38.780  19.098  1.00 18.02           C
ATOM     443  C    ALA A1058       13.139  39.865  19.448  1.00 18.51           C
ATOM     444  O    ALA A1058       12.502  39.657  20.482  1.00 17.31           O
ATOM     445  N    LYS A1059       13.213  41.062  18.875  1.00 19.01           N
ATOM     446  CA   LYS A1059       12.560  42.230  19.470  1.00 20.07           C
ATOM     447  CB   LYS A1059       13.026  43.513  18.771  1.00 19.92           C
ATOM     448  CG   LYS A1059       14.539  43.671  18.811  1.00 20.81           C
ATOM     449  CD   LYS A1059       15.003  45.101  18.534  1.00 21.35           C
ATOM     450  CE   LYS A1059       16.530  45.190  18.538  1.00 21.30           C
ATOM     451  NZ   LYS A1059       17.028  46.597  18.453  1.00 21.29           N
ATOM     452  C    LYS A1059       11.045  42.112  19.420  1.00 20.60           C
ATOM     453  O    LYS A1059       10.341  42.601  20.309  1.00 19.75           O
ATOM     454  N    GLU A1060       10.550  41.448  18.381  1.00 21.44           N
ATOM     455  CA   GLU A1060        9.118  41.246  18.234  1.00 22.69           C
ATOM     456  CB   GLU A1060        8.783  40.742  16.832  1.00 24.22           C
ATOM     457  CG   GLU A1060        7.303  40.761  16.521  1.00 27.42           C
ATOM     458  CD   GLU A1060        6.730  42.169  16.542  1.00 29.59           C
ATOM     459  OE1  GLU A1060        7.314  43.053  15.866  1.00 29.73           O
ATOM     460  OE2  GLU A1060        5.700  42.386  17.229  1.00 30.63           O
ATOM     461  C    GLU A1060        8.651  40.220  19.263  1.00 22.63           C
ATOM     462  O    GLU A1060        7.631  40.418  19.932  1.00 22.87           O
ATOM     463  N    ALA A1061        9.395  39.125  19.391  1.00 22.05           N
ATOM     464  CA   ALA A1061        9.012  38.091  20.346  1.00 22.06           C
ATOM     465  CB   ALA A1061        9.967  36.899  20.266  1.00 21.94           C
ATOM     466  C    ALA A1061        8.997  38.663  21.755  1.00 22.04           C
ATOM     467  O    ALA A1061        8.106  38.359  22.539  1.00 21.13           O
ATOM     468  N    PHE A1062        9.978  39.506  22.063  1.00 22.38           N
ATOM     469  CA   PHE A1062       10.055  40.119  23.380  1.00 23.29           C
ATOM     470  CB   PHE A1062       11.348  40.918  23.532  1.00 22.75           C
ATOM     471  CG   PHE A1062       11.440  41.648  24.833  1.00 22.71           C
ATOM     472  CD1  PHE A1062       10.804  42.876  25.003  1.00 22.28           C
ATOM     473  CD2  PHE A1062       12.107  41.080  25.914  1.00 22.60           C
ATOM     474  CE1  PHE A1062       10.828  43.529  26.232  1.00 22.88           C
ATOM     475  CE2  PHE A1062       12.138  41.722  27.154  1.00 22.54           C
ATOM    476  CZ  PHE A1062      11.497  42.951  27.314  1.00 22.78           C
ATOM    477  C   PHE A1062       8.865  41.030  23.667  1.00 24.27           C
ATOM    478  O   PHE A1062       8.302  41.002  24.765  1.00 24.37           O
ATOM    479  N   SER A1063       8.498  41.843  22.681  1.00 25.39           N
ATOM    480  CA  SER A1063       7.373  42.751  22.818  1.00 26.79           C
ATOM    481  CB  SER A1063       7.196  43.580  21.542  1.00 27.55           C
ATOM    482  OG  SER A1063       8.184  44.598  21.464  1.00 28.80           O
ATOM    483  C   SER A1063       6.108  41.965  23.094  1.00 27.26           C
ATOM    484  O   SER A1063       5.271  42.366  23.897  1.00 27.47           O
ATOM    485  N   LYS A1064       5.963  40.840  22.421  1.00 28.03           N
ATOM    486  CA  LYS A1064       4.793  40.018  22.637  1.00 29.08           C
ATOM    487  CB  LYS A1064       4.725  38.936  21.566  1.00 28.90           C
ATOM    488  CG  LYS A1064       4.426  39.521  20.195  1.00 30.31           C
ATOM    489  CD  LYS A1064       4.605  38.519  19.075  1.00 31.26           C
ATOM    490  CE  LYS A1064       3.733  37.309  19.269  1.00 32.24           C
ATOM    491  NZ  LYS A1064       3.887  36.361  18.141  1.00 33.56           N
ATOM    492  C   LYS A1064       4.866  39.428  24.043  1.00 29.71           C
ATOM    493  O   LYS A1064       3.886  39.467  24.788  1.00 29.61           O
ATOM    494  N   ALA A1065       6.043  38.926  24.413  1.00 30.48           N
ATOM    495  CA  ALA A1065       6.263  38.341  25.732  1.00 31.56           C
ATOM    496  CB  ALA A1065       7.739  38.022  25.917  1.00 31.00           C
ATOM    497  C   ALA A1065       5.780  39.269  26.851  1.00 32.65           C
ATOM    498  O   ALA A1065       5.300  38.807  27.882  1.00 31.64           O
ATOM    499  N   MET A1066       5.922  40.574  26.646  1.00 34.63           N
ATOM    500  CA  MET A1066       5.479  41.557  27.630  1.00 37.05           C
ATOM    501  CB  MET A1066       6.245  42.874  27.458  1.00 37.61           C
ATOM    502  CG  MET A1066       7.710  42.808  27.867  1.00 39.52           C
ATOM    503  SD  MET A1066       8.007  43.039  29.649  1.00 41.34           S
ATOM    504  CE  MET A1066       8.983  44.550  29.647  1.00 40.03           C
ATOM    505  C   MET A1066       3.985  41.798  27.435  1.00 38.24           C
ATOM    506  O   MET A1066       3.313  42.364  28.295  1.00 38.31           O
ATOM    507  N   GLY A1067       3.473  41.353  26.293  1.00 39.97           N
ATOM    508  CA  GLY A1067       2.065  41.524  25.996  1.00 42.23           C
ATOM    509  C   GLY A1067       1.716  42.953  25.623  1.00 43.61           C
ATOM    510  O   GLY A1067       1.055  43.658  26.383  1.00 44.09           O
ATOM    511  N   THR A1068       2.167  43.387  24.452  1.00 44.84           N
ATOM    512  CA  THR A1068       1.889  44.739  23.985  1.00 46.14           C
ATOM    513  CB  THR A1068       3.165  45.419  23.444  1.00 45.80           C
ATOM    514  OG1 THR A1068       3.639  44.703  22.297  1.00 45.63           O
ATOM    515  CG2 THR A1068       4.249  45.434  24.500  1.00 45.44           C
ATOM    516  C   THR A1068       0.854  44.654  22.868  1.00 47.39           C
ATOM    517  O   THR A1068       0.473  45.661  22.270  1.00 47.66           O
ATOM    518  N   GLY A1069       0.409  43.432  22.592  1.00 48.83           N
ATOM    519  CA  GLY A1069      -0.585  43.211  21.555  1.00 50.40           C
ATOM    520  C   GLY A1069      -0.073  43.511  20.162  1.00 51.38           C
ATOM    521  O   GLY A1069       0.661  42.716  19.569  1.00 51.45           O
ATOM    522  N   ILE A1070      -0.473  44.665  19.637  1.00 52.38           N
ATOM    523  CA  ILE A1070      -0.061  45.102  18.308  1.00 53.00           C
ATOM    524  CB  ILE A1070      -1.285  45.483  17.444  1.00 53.24           C
ATOM    525  CG2 ILE A1070      -2.148  44.245  17.194  1.00 53.03           C
ATOM    526  CG1 ILE A1070      -2.102  46.575  18.145  1.00 53.21           C
ATOM    527  CD1 ILE A1070      -3.310  47.043  17.350  1.00 53.51           C
ATOM    528  C   ILE A1070       0.850  46.316  18.471  1.00 53.30           C
ATOM    529  O   ILE A1070       1.800  46.506  17.705  1.00 53.48           O
ATOM    530  N   SER A1071       0.544  47.137  19.473  1.00 53.35           N
ATOM    531  CA  SER A1071       1.344  48.321  19.771  1.00 53.45           C
ATOM    532  CB  SER A1071       0.643  49.183  20.816  1.00 53.58           C
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ATOM    533  OG  SER A1071       0.577  48.494  22.058  1.00 54.00           O
ATOM    534  C   SER A1071       2.631  47.765  20.360  1.00 53.38           C
ATOM    535  O   SER A1071       2.596  46.720  21.019  1.00 53.61           O
ATOM    536  N   LYS A1072       3.763  48.431  20.138  1.00 52.81           N
ATOM    537  CA  LYS A1072       5.019  47.908  20.680  1.00 52.05           C
ATOM    538  CB  LYS A1072       5.857  47.243  19.575  1.00 52.53           C
ATOM    539  CG  LYS A1072       5.068  46.578  18.459  1.00 53.49           C
ATOM    540  CD  LYS A1072       4.079  45.535  18.964  1.00 54.32           C
ATOM    541  CE  LYS A1072       4.750  44.344  19.619  1.00 54.90           C
ATOM    542  NZ  LYS A1072       3.722  43.377  20.117  1.00 55.42           N
ATOM    543  C   LYS A1072       5.897  48.936  21.383  1.00 51.05           C
ATOM    544  O   LYS A1072       5.587  50.127  21.442  1.00 50.60           O
ATOM    545  N   LEU A1073       7.002  48.435  21.923  1.00 50.01           N
ATOM    546  CA  LEU A1073       7.989  49.254  22.599  1.00 48.81           C
ATOM    547  CB  LEU A1073       8.785  48.409  23.601  1.00 49.31           C
ATOM    548  CG  LEU A1073       8.166  48.084  24.969  1.00 49.63           C
ATOM    549  CD1 LEU A1073       6.806  47.433  24.812  1.00 49.83           C
ATOM    550  CD2 LEU A1073       9.099  47.160  25.720  1.00 50.04           C
ATOM    551  C   LEU A1073       8.930  49.779  21.521  1.00 47.79           C
ATOM    552  O   LEU A1073       8.923  49.294  20.383  1.00 47.71           O
ATOM    553  N   GLY A1074       9.733  50.776  21.869  1.00 46.44           N
ATOM    554  CA  GLY A1074      10.670  51.301  20.896  1.00 44.58           C
ATOM    555  C   GLY A1074      11.722  50.244  20.621  1.00 43.12           C
ATOM    556  O   GLY A1074      12.315  49.697  21.553  1.00 43.10           O
ATOM    557  N   PHE A1075      11.949  49.934  19.351  1.00 41.71           N
ATOM    558  CA  PHE A1075      12.949  48.937  19.006  1.00 40.26           C
ATOM    559  CB  PHE A1075      12.870  48.613  17.514  1.00 41.07           C
ATOM    560  CG  PHE A1075      11.958  47.459  17.207  1.00 42.00           C
ATOM    561  CD1 PHE A1075      10.930  47.112  18.096  1.00 42.62           C
ATOM    562  CD2 PHE A1075      12.124  46.707  16.048  1.00 42.28           C
ATOM    563  CE1 PHE A1075      10.081  46.026  17.835  1.00 42.81           C
ATOM    564  CE2 PHE A1075      11.281  45.617  15.771  1.00 42.42           C
ATOM    565  CZ  PHE A1075      10.261  45.276  16.666  1.00 42.86           C
ATOM    566  C   PHE A1075      14.346  49.388  19.413  1.00 38.94           C
ATOM    567  O   PHE A1075      15.257  48.569  19.552  1.00 38.45           O
ATOM    568  N   GLN A1076      14.503  50.692  19.623  1.00 37.14           N
ATOM    569  CA  GLN A1076      15.779  51.244  20.051  1.00 35.77           C
ATOM    570  CB  GLN A1076      15.864  52.739  19.720  1.00 35.98           C
ATOM    571  CG  GLN A1076      16.064  53.046  18.240  1.00 35.74           C
ATOM    572  CD  GLN A1076      17.323  52.418  17.683  1.00 35.92           C
ATOM    573  OE1 GLN A1076      18.429  52.672  18.169  1.00 36.68           O
ATOM    574  NE2 GLN A1076      17.166  51.592  16.659  1.00 35.79           N
ATOM    575  C   GLN A1076      15.927  51.043  21.556  1.00 34.84           C
ATOM    576  O   GLN A1076      17.000  51.249  22.116  1.00 34.87           O
ATOM    577  N   ASP A1077      14.840  50.638  22.202  1.00 33.69           N
ATOM    578  CA  ASP A1077      14.838  50.395  23.641  1.00 32.88           C
ATOM    579  CB  ASP A1077      13.466  50.738  24.229  1.00 34.04           C
ATOM    580  CG  ASP A1077      13.183  52.230  24.220  1.00 35.48           C
ATOM    581  OD1 ASP A1077      13.877  52.971  24.953  1.00 36.31           O
ATOM    582  OD2 ASP A1077      12.269  52.659  23.477  1.00 36.39           O
ATOM    583  C   ASP A1077      15.170  48.935  23.943  1.00 31.37           C
ATOM    584  O   ASP A1077      15.205  48.517  25.103  1.00 30.93           O
ATOM    585  N   LEU A1078      15.408  48.165  22.889  1.00 29.66           N
ATOM    586  CA  LEU A1078      15.724  46.753  23.026  1.00 28.12           C
ATOM    587  CB  LEU A1078      14.605  45.907  22.410  1.00 28.40           C
ATOM    588  CG  LEU A1078      13.211  46.138  22.999  1.00 28.65           C
ATOM    589  CD1 LEU A1078      12.175  45.297  22.250  1.00 28.42           C
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ATOM     590  CD2 LEU A1078      13.232  45.784  24.485  1.00 28.42           C
ATOM     591  C   LEU A1078      17.029  46.469  22.317  1.00 26.77           C
ATOM     592  O   LEU A1078      17.256  46.963  21.219  1.00 26.91           O
ATOM     593  N   GLU A1079      17.892  45.683  22.944  1.00 25.48           N
ATOM     594  CA  GLU A1079      19.166  45.352  22.330  1.00 24.50           C
ATOM     595  CB  GLU A1079      20.287  46.202  22.921  1.00 24.22           C
ATOM     596  CG  GLU A1079      21.561  46.128  22.114  1.00 23.64           C
ATOM     597  CD  GLU A1079      22.638  47.051  22.635  1.00 24.07           C
ATOM     598  OE1 GLU A1079      23.079  46.862  23.791  1.00 23.41           O
ATOM     599  OE2 GLU A1079      23.044  47.967  21.883  1.00 24.29           O
ATOM     600  C   GLU A1079      19.512  43.885  22.488  1.00 23.86           C
ATOM     601  O   GLU A1079      19.341  43.305  23.560  1.00 23.77           O
ATOM     602  N   VAL A1080      20.003  43.291  21.408  1.00 23.09           N
ATOM     603  CA  VAL A1080      20.377  41.888  21.411  1.00 22.78           C
ATOM     604  CB  VAL A1080      19.413  41.032  20.529  1.00 22.41           C
ATOM     605  CG1 VAL A1080      20.005  39.649  20.284  1.00 21.10           C
ATOM     606  CG2 VAL A1080      18.059  40.893  21.224  1.00 21.12           C
ATOM     607  C   VAL A1080      21.800  41.707  20.909  1.00 23.31           C
ATOM     608  O   VAL A1080      22.102  41.942  19.737  1.00 23.36           O
ATOM     609  N   LEU A1081      22.673  41.292  21.818  1.00 23.52           N
ATOM     610  CA  LEU A1081      24.066  41.056  21.488  1.00 23.32           C
ATOM     611  CB  LEU A1081      24.968  41.910  22.391  1.00 22.81           C
ATOM     612  CG  LEU A1081      24.725  43.426  22.313  1.00 22.95           C
ATOM     613  CD1 LEU A1081      25.680  44.170  23.239  1.00 22.31           C
ATOM     614  CD2 LEU A1081      24.919  43.902  20.874  1.00 23.08           C
ATOM     615  C   LEU A1081      24.347  39.576  21.709  1.00 23.58           C
ATOM     616  O   LEU A1081      23.436  38.786  21.981  1.00 22.36           O
ATOM     617  N   ASN A1082      25.614  39.204  21.582  1.00 24.47           N
ATOM     618  CA  ASN A1082      26.018  37.826  21.802  1.00 25.10           C
ATOM     619  CB  ASN A1082      26.745  37.301  20.564  1.00 25.30           C
ATOM     620  CG  ASN A1082      25.798  37.072  19.406  1.00 25.42           C
ATOM     621  OD1 ASN A1082      24.863  36.277  19.514  1.00 26.33           O
ATOM     622  ND2 ASN A1082      26.023  37.769  18.299  1.00 25.02           N
ATOM     623  C   ASN A1082      26.897  37.774  23.042  1.00 25.09           C
ATOM     624  O   ASN A1082      27.802  38.586  23.197  1.00 24.45           O
ATOM     625  N   ASN A1083      26.614  36.825  23.932  1.00 26.16           N
ATOM     626  CA  ASN A1083      27.365  36.697  25.180  1.00 26.89           C
ATOM     627  CB  ASN A1083      26.484  36.048  26.264  1.00 26.14           C
ATOM     628  CG  ASN A1083      26.094  34.600  25.952  1.00 25.65           C
ATOM     629  OD1 ASN A1083      25.289  34.006  26.668  1.00 25.06           O
ATOM     630  ND2 ASN A1083      26.665  34.032  24.900  1.00 25.04           N
ATOM     631  C   ASN A1083      28.691  35.953  25.044  1.00 27.81           C
ATOM     632  O   ASN A1083      29.098  35.595  23.939  1.00 27.57           O
ATOM     633  N   GLU A1084      29.373  35.729  26.162  1.00 29.55           N
ATOM     634  CA  GLU A1084      30.656  35.041  26.102  1.00 31.72           C
ATOM     635  CB  GLU A1084      31.382  35.091  27.465  1.00 32.66           C
ATOM     636  CG  GLU A1084      30.618  34.574  28.685  1.00 34.91           C
ATOM     637  CD  GLU A1084      31.407  34.752  29.998  1.00 36.48           C
ATOM     638  OE1 GLU A1084      32.421  34.051  30.192  1.00 37.32           O
ATOM     639  OE2 GLU A1084      31.022  35.601  30.841  1.00 37.46           O
ATOM     640  C   GLU A1084      30.532  33.603  25.584  1.00 32.13           C
ATOM     641  O   GLU A1084      31.522  33.007  25.186  1.00 32.93           O
ATOM     642  N   ARG A1085      29.322  33.052  25.578  1.00 32.33           N
ATOM     643  CA  ARG A1085      29.118  31.703  25.061  1.00 32.71           C
ATOM     644  CB  ARG A1085      28.057  30.950  25.866  1.00 34.65           C
ATOM     645  CG  ARG A1085      28.525  30.506  27.238  1.00 37.26           C
ATOM     646  CD  ARG A1085      29.588  29.432  27.112  1.00 39.70           C
ATOM    647  NE   ARG A1085      30.430  29.337  28.303  1.00 42.39         N
ATOM    648  CZ   ARG A1085      31.329  28.375  28.501  1.00 43.44         C
ATOM    649  NH1  ARG A1085      32.062  28.363  29.611  1.00 44.05         N
ATOM    650  NH2  ARG A1085      31.482  27.415  27.593  1.00 43.73         N
ATOM    651  C    ARG A1085      28.682  31.788  23.606  1.00 31.86         C
ATOM    652  O    ARG A1085      28.369  30.775  22.983  1.00 32.12         O
ATOM    653  N    GLY A1086      28.664  33.006  23.070  1.00 30.59         N
ATOM    654  CA   GLY A1086      28.275  33.206  21.687  1.00 29.15         C
ATOM    655  C    GLY A1086      26.779  33.208  21.427  1.00 28.22         C
ATOM    656  O    GLY A1086      26.347  33.336  20.287  1.00 28.76         O
ATOM    657  N    ALA A1087      25.980  33.079  22.476  1.00 26.78         N
ATOM    658  CA   ALA A1087      24.536  33.052  22.313  1.00 25.40         C
ATOM    659  CB   ALA A1087      23.907  32.162  23.378  1.00 24.76         C
ATOM    660  C    ALA A1087      23.936  34.448  22.390  1.00 24.84         C
ATOM    661  O    ALA A1087      24.417  35.304  23.142  1.00 24.29         O
ATOM    662  N    PRO A1088      22.886  34.703  21.591  1.00 23.94         N
ATOM    663  CD   PRO A1088      22.363  33.864  20.496  1.00 23.58         C
ATOM    664  CA   PRO A1088      22.234  36.009  21.601  1.00 23.19         C
ATOM    665  CB   PRO A1088      21.303  35.944  20.388  1.00 23.32         C
ATOM    666  CG   PRO A1088      21.019  34.482  20.239  1.00 23.28         C
ATOM    667  C    PRO A1088      21.483  36.232  22.911  1.00 22.65         C
ATOM    668  O    PRO A1088      20.908  35.304  23.475  1.00 22.59         O
ATOM    669  N    TYR A1089      21.518  37.464  23.407  1.00 22.22         N
ATOM    670  CA   TYR A1089      20.824  37.808  24.645  1.00 21.73         C
ATOM    671  CB   TYR A1089      21.720  37.537  25.866  1.00 21.31         C
ATOM    672  CG   TYR A1089      22.843  38.540  26.058  1.00 20.82         C
ATOM    673  CD1  TYR A1089      22.795  39.475  27.095  1.00 20.39         C
ATOM    674  CE1  TYR A1089      23.791  40.428  27.253  1.00 20.46         C
ATOM    675  CD2  TYR A1089      23.931  38.582  25.177  1.00 20.50         C
ATOM    676  CE2  TYR A1089      24.942  39.535  25.323  1.00 20.31         C
ATOM    677  CZ   TYR A1089      24.865  40.458  26.363  1.00 21.12         C
ATOM    678  OH   TYR A1089      25.844  41.421  26.507  1.00 20.91         O
ATOM    679  C    TYR A1089      20.459  39.278  24.598  1.00 21.43         C
ATOM    680  O    TYR A1089      20.986  40.045  23.782  1.00 21.20         O
ATOM    681  N    PHE A1090      19.541  39.670  25.469  1.00 21.81         N
ATOM    682  CA   PHE A1090      19.134  41.058  25.534  1.00 21.85         C
ATOM    683  CB   PHE A1090      17.694  41.182  26.041  1.00 20.99         C
ATOM    684  CG   PHE A1090      16.651  40.841  25.006  1.00 20.79         C
ATOM    685  CD1  PHE A1090      16.294  39.519  24.755  1.00 20.19         C
ATOM    686  CD2  PHE A1090      16.052  41.849  24.247  1.00 20.29         C
ATOM    687  CE1  PHE A1090      15.364  39.207  23.760  1.00 19.79         C
ATOM    688  CE2  PHE A1090      15.122  41.543  23.252  1.00 20.00         C
ATOM    689  CZ   PHE A1090      14.778  40.221  23.007  1.00 19.21         C
ATOM    690  C    PHE A1090      20.087  41.794  26.467  1.00 22.39         C
ATOM    691  O    PHE A1090      20.197  41.460  27.643  1.00 22.82         O
ATOM    692  N    SER A1091      20.791  42.780  25.922  1.00 23.17         N
ATOM    693  CA   SER A1091      21.725  43.590  26.697  1.00 24.38         C
ATOM    694  CB   SER A1091      22.879  44.048  25.805  1.00 24.43         C
ATOM    695  OG   SER A1091      22.405  44.352  24.504  1.00 25.11         O
ATOM    696  C    SER A1091      20.979  44.805  27.248  1.00 24.91         C
ATOM    697  O    SER A1091      21.420  45.443  28.204  1.00 24.93         O
ATOM    698  N    GLN A1092      19.854  45.124  26.618  1.00 25.07         N
ATOM    699  CA   GLN A1092      19.023  46.235  27.046  1.00 26.14         C
ATOM    700  CB   GLN A1092      19.357  47.517  26.258  1.00 27.41         C
ATOM    701  CG   GLN A1092      20.779  48.089  26.463  1.00 29.10         C
ATOM    702  CD   GLN A1092      21.096  48.475  27.918  1.00 31.36         C
ATOM    703  OE1  GLN A1092      20.273  49.093  28.607  1.00 32.18         O
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ATOM    704  NE2 GLN A1092      22.306  48.127  28.380  1.00 31.33           N
ATOM    705  C   GLN A1092      17.556  45.850  26.841  1.00 25.78           C
ATOM    706  O   GLN A1092      17.148  45.443  25.753  1.00 25.27           O
ATOM    707  N   ALA A1093      16.777  45.961  27.909  1.00 25.60           N
ATOM    708  CA  ALA A1093      15.357  45.630  27.870  1.00 25.62           C
ATOM    709  CB  ALA A1093      15.171  44.110  27.867  1.00 24.75           C
ATOM    710  C   ALA A1093      14.677  46.238  29.090  1.00 25.61           C
ATOM    711  O   ALA A1093      15.220  46.209  30.186  1.00 25.48           O
ATOM    712  N   PRO A1094      13.474  46.796  28.916  1.00 26.29           N
ATOM    713  CD  PRO A1094      12.668  46.878  27.682  1.00 26.31           C
ATOM    714  CA  PRO A1094      12.758  47.400  30.046  1.00 26.85           C
ATOM    715  CB  PRO A1094      11.622  48.147  29.358  1.00 26.71           C
ATOM    716  CG  PRO A1094      11.292  47.223  28.222  1.00 26.01           C
ATOM    717  C   PRO A1094      12.241  46.343  31.024  1.00 27.25           C
ATOM    718  O   PRO A1094      11.182  46.511  31.631  1.00 28.16           O
ATOM    719  N   PHE A1095      12.980  45.248  31.167  1.00 26.92           N
ATOM    720  CA  PHE A1095      12.571  44.181  32.069  1.00 26.96           C
ATOM    721  CB  PHE A1095      12.234  42.918  31.279  1.00 26.69           C
ATOM    722  CG  PHE A1095      11.729  41.782  32.127  1.00 26.67           C
ATOM    723  CD1 PHE A1095      12.396  40.553  32.137  1.00 26.30           C
ATOM    724  CD2 PHE A1095      10.567  41.920  32.879  1.00 25.87           C
ATOM    725  CE1 PHE A1095      11.911  39.481  32.878  1.00 25.90           C
ATOM    726  CE2 PHE A1095      10.074  40.853  33.624  1.00 25.69           C
ATOM    727  CZ  PHE A1095      10.746  39.628  33.625  1.00 26.13           C
ATOM    728  C   PHE A1095      13.685  43.891  33.055  1.00 26.99           C
ATOM    729  O   PHE A1095      14.854  43.835  32.680  1.00 27.34           O
ATOM    730  N   SER A1096      13.319  43.687  34.314  1.00 26.53           N
ATOM    731  CA  SER A1096      14.308  43.436  35.340  1.00 26.73           C
ATOM    732  CB  SER A1096      13.973  44.263  36.596  1.00 27.70           C
ATOM    733  OG  SER A1096      12.642  44.023  37.052  1.00 29.18           O
ATOM    734  C   SER A1096      14.500  41.968  35.715  1.00 26.21           C
ATOM    735  O   SER A1096      15.426  41.639  36.464  1.00 26.51           O
ATOM    736  N   GLY A1097      13.648  41.088  35.198  1.00 25.26           N
ATOM    737  CA  GLY A1097      13.773  39.679  35.521  1.00 24.11           C
ATOM    738  C   GLY A1097      14.633  38.918  34.529  1.00 24.17           C
ATOM    739  O   GLY A1097      15.383  39.512  33.758  1.00 24.01           O
ATOM    740  N   LYS A1098      14.526  37.594  34.552  1.00 23.74           N
ATOM    741  CA  LYS A1098      15.281  36.745  33.643  1.00 23.42           C
ATOM    742  CB  LYS A1098      15.360  35.309  34.172  1.00 24.51           C
ATOM    743  CG  LYS A1098      16.177  35.141  35.444  1.00 26.65           C
ATOM    744  CD  LYS A1098      16.236  33.682  35.898  1.00 28.23           C
ATOM    745  CE  LYS A1098      17.224  33.510  37.058  1.00 30.02           C
ATOM    746  NZ  LYS A1098      17.270  32.108  37.594  1.00 30.95           N
ATOM    747  C   LYS A1098      14.602  36.730  32.287  1.00 22.48           C
ATOM    748  O   LYS A1098      13.374  36.671  32.192  1.00 22.17           O
ATOM    749  N   ILE A1099      15.419  36.782  31.241  1.00 21.41           N
ATOM    750  CA  ILE A1099      14.941  36.761  29.876  1.00 20.15           C
ATOM    751  CB  ILE A1099      15.333  38.039  29.134  1.00 19.84           C
ATOM    752  CG2 ILE A1099      14.804  37.989  27.713  1.00 20.13           C
ATOM    753  CG1 ILE A1099      14.791  39.263  29.873  1.00 19.76           C
ATOM    754  CD1 ILE A1099      15.218  40.583  29.262  1.00 18.64           C
ATOM    755  C   ILE A1099      15.576  35.581  29.148  1.00 19.81           C
ATOM    756  O   ILE A1099      16.791  35.528  28.972  1.00 20.43           O
ATOM    757  N   TRP A1100      14.761  34.623  28.740  1.00 19.20           N
ATOM    758  CA  TRP A1100      15.277  33.480  28.005  1.00 18.42           C
ATOM    759  CB  TRP A1100      14.653  32.193  28.530  1.00 17.66           C
ATOM    760  CG  TRP A1100      14.970  31.962  29.973  1.00 17.80           C
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ATOM    761  CD2 TRP A1100      16.150  31.351  30.501  1.00 17.39           C
ATOM    762  CE2 TRP A1100      16.038  31.375  31.914  1.00 17.58           C
ATOM    763  CE3 TRP A1100      17.294  30.787  29.921  1.00 17.40           C
ATOM    764  CD1 TRP A1100      14.210  32.323  31.055  1.00 17.92           C
ATOM    765  NE1 TRP A1100      14.844  31.972  32.222  1.00 17.09           N
ATOM    766  CZ2 TRP A1100      17.030  30.851  32.759  1.00 16.77           C
ATOM    767  CZ3 TRP A1100      18.283  30.268  30.763  1.00 17.50           C
ATOM    768  CH2 TRP A1100      18.138  30.307  32.167  1.00 17.07           C
ATOM    769  C   TRP A1100      14.946  33.700  26.526  1.00 17.86           C
ATOM    770  O   TRP A1100      13.791  33.866  26.143  1.00 18.05           O
ATOM    771  N   LEU A1101      15.987  33.725  25.707  1.00 17.46           N
ATOM    772  CA  LEU A1101      15.852  33.967  24.290  1.00 16.38           C
ATOM    773  CB  LEU A1101      16.469  35.325  23.955  1.00 15.64           C
ATOM    774  CG  LEU A1101      16.715  35.601  22.468  1.00 15.15           C
ATOM    775  CD1 LEU A1101      15.379  35.873  21.762  1.00 13.79           C
ATOM    776  CD2 LEU A1101      17.669  36.775  22.317  1.00 14.27           C
ATOM    777  C   LEU A1101      16.520  32.916  23.429  1.00 16.47           C
ATOM    778  O   LEU A1101      17.624  32.474  23.720  1.00 16.38           O
ATOM    779  N   SER A1102      15.847  32.520  22.356  1.00 17.12           N
ATOM    780  CA  SER A1102      16.429  31.565  21.432  1.00 17.39           C
ATOM    781  CB  SER A1102      15.962  30.140  21.722  1.00 16.65           C
ATOM    782  OG  SER A1102      16.736  29.217  20.966  1.00 15.28           O
ATOM    783  C   SER A1102      16.052  31.965  20.011  1.00 18.55           C
ATOM    784  O   SER A1102      14.902  32.319  19.727  1.00 18.33           O
ATOM    785  N   ILE A1103      17.043  31.930  19.127  1.00 19.20           N
ATOM    786  CA  ILE A1103      16.836  32.286  17.740  1.00 20.42           C
ATOM    787  CB  ILE A1103      17.588  33.578  17.386  1.00 20.38           C
ATOM    788  CG2 ILE A1103      17.216  34.026  15.981  1.00 19.83           C
ATOM    789  CG1 ILE A1103      17.240  34.675  18.399  1.00 20.72           C
ATOM    790  CD1 ILE A1103      17.996  35.980  18.172  1.00 20.84           C
ATOM    791  C   ILE A1103      17.347  31.169  16.843  1.00 21.44           C
ATOM    792  O   ILE A1103      18.373  30.551  17.121  1.00 21.72           O
ATOM    793  N   SER A1104      16.625  30.916  15.764  1.00 21.94           N
ATOM    794  CA  SER A1104      17.015  29.884  14.823  1.00 22.99           C
ATOM    795  CB  SER A1104      16.334  28.556  15.185  1.00 22.73           C
ATOM    796  OG  SER A1104      16.618  27.550  14.229  1.00 21.97           O
ATOM    797  C   SER A1104      16.607  30.322  13.421  1.00 23.89           C
ATOM    798  O   SER A1104      15.698  31.139  13.246  1.00 24.13           O
ATOM    799  N   HIS A1105      17.283  29.787  12.417  1.00 25.15           N
ATOM    800  CA  HIS A1105      16.943  30.144  11.049  1.00 26.29           C
ATOM    801  CB  HIS A1105      17.665  31.429  10.633  1.00 26.35           C
ATOM    802  CG  HIS A1105      19.153  31.290  10.559  1.00 27.08           C
ATOM    803  CD2 HIS A1105      19.960  30.889   9.549  1.00 27.02           C
ATOM    804  ND1 HIS A1105      19.980  31.551  11.630  1.00 27.58           N
ATOM    805  CE1 HIS A1105      21.234  31.317  11.283  1.00 27.17           C
ATOM    806  NE2 HIS A1105      21.249  30.914  10.025  1.00 27.22           N
ATOM    807  C   HIS A1105      17.276  29.060  10.042  1.00 26.76           C
ATOM    808  O   HIS A1105      18.031  28.129  10.318  1.00 26.55           O
ATOM    809  N   THR A1106      16.670  29.197   8.874  1.00 27.49           N
ATOM    810  CA  THR A1106      16.901  28.309   7.751  1.00 28.62           C
ATOM    811  CB  THR A1106      15.595  27.643   7.273  1.00 28.44           C
ATOM    812  OG1 THR A1106      14.721  28.635   6.712  1.00 27.15           O
ATOM    813  CG2 THR A1106      14.901  26.954   8.447  1.00 28.62           C
ATOM    814  C   THR A1106      17.381  29.299   6.698  1.00 29.33           C
ATOM    815  O   THR A1106      17.685  30.442   7.027  1.00 29.14           O
ATOM    816  N   ASP A1107      17.446  28.880   5.444  1.00 30.59           N
ATOM    817  CA  ASP A1107      17.878  29.789   4.392  1.00 31.74           C
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ATOM    818  CB   ASP A1107      18.324  28.992   3.160  1.00 33.44         C
ATOM    819  CG   ASP A1107      19.499  28.054   3.454  1.00 35.18         C
ATOM    820  OD1  ASP A1107      19.827  27.214   2.582  1.00 36.15         O
ATOM    821  OD2  ASP A1107      20.099  28.153   4.548  1.00 35.79         O
ATOM    822  C    ASP A1107      16.720  30.722   4.020  1.00 31.63         C
ATOM    823  O    ASP A1107      16.913  31.724   3.334  1.00 31.90         O
ATOM    824  N    GLN A1108      15.518  30.401   4.494  1.00 31.41         N
ATOM    825  CA   GLN A1108      14.336  31.201   4.175  1.00 30.98         C
ATOM    826  CB   GLN A1108      13.340  30.345   3.399  1.00 32.64         C
ATOM    827  CG   GLN A1108      13.860  29.898   2.038  1.00 34.63         C
ATOM    828  CD   GLN A1108      12.917  28.945   1.346  1.00 35.98         C
ATOM    829  OE1  GLN A1108      12.698  27.819   1.807  1.00 36.85         O
ATOM    830  NE2  GLN A1108      12.340  29.391   0.231  1.00 36.81         N
ATOM    831  C    GLN A1108      13.616  31.862   5.338  1.00 29.94         C
ATOM    832  O    GLN A1108      12.985  32.899   5.158  1.00 29.44         O
ATOM    833  N    PHE A1109      13.700  31.269   6.529  1.00 29.06         N
ATOM    834  CA   PHE A1109      13.024  31.838   7.692  1.00 27.73         C
ATOM    835  CB   PHE A1109      11.762  31.036   8.037  1.00 27.57         C
ATOM    836  CG   PHE A1109      10.744  31.005   6.941  1.00 27.23         C
ATOM    837  CD1  PHE A1109      10.788  30.017   5.962  1.00 27.53         C
ATOM    838  CD2  PHE A1109       9.749  31.976   6.871  1.00 27.16         C
ATOM    839  CE1  PHE A1109       9.852  30.000   4.921  1.00 27.28         C
ATOM    840  CE2  PHE A1109       8.810  31.970   5.838  1.00 26.77         C
ATOM    841  CZ   PHE A1109       8.861  30.981   4.861  1.00 26.97         C
ATOM    842  C    PHE A1109      13.868  31.932   8.950  1.00 26.95         C
ATOM    843  O    PHE A1109      14.877  31.243   9.102  1.00 27.19         O
ATOM    844  N    VAL A1110      13.431  32.803   9.852  1.00 25.89         N
ATOM    845  CA   VAL A1110      14.080  32.992  11.138  1.00 25.13         C
ATOM    846  CB   VAL A1110      14.844  34.347  11.197  1.00 25.40         C
ATOM    847  CG1  VAL A1110      13.874  35.510  11.081  1.00 25.64         C
ATOM    848  CG2  VAL A1110      15.623  34.449  12.499  1.00 25.77         C
ATOM    849  C    VAL A1110      12.956  32.973  12.184  1.00 24.39         C
ATOM    850  O    VAL A1110      11.863  33.500  11.936  1.00 24.17         O
ATOM    851  N    THR A1111      13.206  32.344  13.332  1.00 23.30         N
ATOM    852  CA   THR A1111      12.208  32.289  14.404  1.00 22.55         C
ATOM    853  CB   THR A1111      11.610  30.888  14.562  1.00 22.93         C
ATOM    854  OG1  THR A1111      12.670  29.954  14.786  1.00 24.79         O
ATOM    855  CG2  THR A1111      10.839  30.479  13.323  1.00 23.61         C
ATOM    856  C    THR A1111      12.830  32.664  15.746  1.00 21.62         C
ATOM    857  O    THR A1111      13.999  32.377  16.002  1.00 21.64         O
ATOM    858  N    ALA A1112      12.041  33.299  16.605  1.00 20.37         N
ATOM    859  CA   ALA A1112      12.522  33.688  17.922  1.00 19.66         C
ATOM    860  CB   ALA A1112      12.800  35.202  17.970  1.00 19.55         C
ATOM    861  C    ALA A1112      11.516  33.311  19.004  1.00 19.07         C
ATOM    862  O    ALA A1112      10.302  33.410  18.814  1.00 19.29         O
ATOM    863  N    SER A1113      12.034  32.872  20.139  1.00 17.99         N
ATOM    864  CA   SER A1113      11.195  32.506  21.263  1.00 17.22         C
ATOM    865  CB   SER A1113      11.174  30.989  21.457  1.00 16.88         C
ATOM    866  OG   SER A1113      10.313  30.614  22.521  1.00 16.26         O
ATOM    867  C    SER A1113      11.782  33.180  22.487  1.00 17.09         C
ATOM    868  O    SER A1113      12.995  33.112  22.733  1.00 16.32         O
ATOM    869  N    VAL A1114      10.906  33.831  23.245  1.00 17.10         N
ATOM    870  CA   VAL A1114      11.289  34.548  24.451  1.00 16.74         C
ATOM    871  CB   VAL A1114      11.164  36.081  24.243  1.00 16.29         C
ATOM    872  CG1  VAL A1114      11.205  36.814  25.592  1.00 15.10         C
ATOM    873  CG2  VAL A1114      12.298  36.574  23.329  1.00 16.31         C
ATOM    874  C    VAL A1114      10.422  34.149  25.635  1.00 17.36         C
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ATOM    875  O   VAL A1114       9.190  34.114  25.544  1.00 16.90           O
ATOM    876  N   ILE A1115      11.073  33.834  26.747  1.00 17.78           N
ATOM    877  CA  ILE A1115      10.354  33.478  27.957  1.00 18.59           C
ATOM    878  CB  ILE A1115      10.632  32.020  28.395  1.00 17.89           C
ATOM    879  CG2 ILE A1115       9.806  31.691  29.641  1.00 17.73           C
ATOM    880  CG1 ILE A1115      10.247  31.053  27.272  1.00 18.13           C
ATOM    881  CD1 ILE A1115      10.654  29.599  27.521  1.00 17.22           C
ATOM    882  C   ILE A1115      10.830  34.431  29.049  1.00 19.32           C
ATOM    883  O   ILE A1115      12.025  34.538  29.304  1.00 19.25           O
ATOM    884  N   LEU A1116       9.895  35.137  29.670  1.00 20.62           N
ATOM    885  CA  LEU A1116      10.239  36.066  30.736  1.00 22.56           C
ATOM    886  CB  LEU A1116       9.408  37.341  30.617  1.00 22.06           C
ATOM    887  CG  LEU A1116       9.547  38.064  29.272  1.00 22.11           C
ATOM    888  CD1 LEU A1116       8.540  39.207  29.187  1.00 21.22           C
ATOM    889  CD2 LEU A1116      10.969  38.578  29.113  1.00 21.72           C
ATOM    890  C   LEU A1116       9.984  35.379  32.069  1.00 24.06           C
ATOM    891  O   LEU A1116       8.936  34.765  32.275  1.00 23.78           O
ATOM    892  N   GLU A1117      10.953  35.486  32.970  1.00 25.93           N
ATOM    893  CA  GLU A1117      10.857  34.843  34.267  1.00 28.06           C
ATOM    894  CB  GLU A1117      11.604  33.502  34.204  1.00 28.05           C
ATOM    895  CG  GLU A1117      11.800  32.793  35.536  1.00 28.32           C
ATOM    896  CD  GLU A1117      12.626  31.512  35.405  1.00 28.66           C
ATOM    897  OE1 GLU A1117      13.711  31.567  34.777  1.00 28.33           O
ATOM    898  OE2 GLU A1117      12.196  30.458  35.936  1.00 28.07           O
ATOM    899  C   GLU A1117      11.413  35.699  35.404  1.00 29.70           C
ATOM    900  O   GLU A1117      12.242  36.583  35.190  1.00 29.81           O
ATOM    901  N   GLU A1118      10.928  35.441  36.615  1.00 31.64           N
ATOM    902  CA  GLU A1118      11.416  36.141  37.794  1.00 33.73           C
ATOM    903  CB  GLU A1118      10.860  37.567  37.862  1.00 35.16           C
ATOM    904  CG  GLU A1118       9.358  37.670  37.941  1.00 37.05           C
ATOM    905  CD  GLU A1118       8.900  39.113  38.056  1.00 38.65           C
ATOM    906  OE1 GLU A1118       9.476  39.973  37.348  1.00 38.82           O
ATOM    907  OE2 GLU A1118       7.961  39.385  38.848  1.00 39.77           O
ATOM    908  C   GLU A1118      11.043  35.365  39.048  1.00 34.16           C
ATOM    909  O   GLU A1118       9.912  34.845  39.107  1.00 34.38           O
ATOM    910  OXT GLU A1118      11.894  35.280  39.956  1.00 35.21           O
TER     911      GLU A1118
ATOM    912  CB  MET B2003       5.244  24.216  39.082  1.00 30.13           C
ATOM    913  CG  MET B2003       5.229  22.763  38.655  1.00 32.03           C
ATOM    914  SD  MET B2003       4.499  21.640  39.877  1.00 34.60           S
ATOM    915  CE  MET B2003       5.729  20.323  39.875  1.00 32.91           C
ATOM    916  C   MET B2003       5.364  24.946  36.697  1.00 27.68           C
ATOM    917  O   MET B2003       4.190  25.254  36.454  1.00 27.76           O
ATOM    918  N   MET B2003       5.824  26.555  38.533  1.00 28.66           N
ATOM    919  CA  MET B2003       5.954  25.143  38.090  1.00 28.51           C
ATOM    920  N   ILE B2004       6.184  24.439  35.782  1.00 26.12           N
ATOM    921  CA  ILE B2004       5.730  24.192  34.423  1.00 24.36           C
ATOM    922  CB  ILE B2004       6.907  24.200  33.423  1.00 23.97           C
ATOM    923  CG2 ILE B2004       6.445  23.691  32.062  1.00 22.87           C
ATOM    924  CG1 ILE B2004       7.465  25.624  33.300  1.00 23.67           C
ATOM    925  CD1 ILE B2004       8.670  25.746  32.379  1.00 23.02           C
ATOM    926  C   ILE B2004       5.035  22.841  34.376  1.00 23.70           C
ATOM    927  O   ILE B2004       5.537  21.854  34.917  1.00 23.27           O
ATOM    928  N   VAL B2005       3.866  22.793  33.748  1.00 22.71           N
ATOM    929  CA  VAL B2005       3.151  21.530  33.660  1.00 22.27           C
ATOM    930  CB  VAL B2005       1.853  21.564  34.494  1.00 21.83           C
ATOM    931  CG1 VAL B2005       2.204  21.793  35.959  1.00 21.47           C
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ATOM	932	CG2	VAL	B2005	0.920	22.653	33.994	1.00	21.79	C
ATOM	933	C	VAL	B2005	2.847	21.133	32.228	1.00	22.00	C
ATOM	934	O	VAL	B2005	2.130	20.163	31.995	1.00	22.54	O
ATOM	935	N	GLY	B2006	3.417	21.880	31.278	1.00	21.53	N
ATOM	936	CA	GLY	B2006	3.225	21.594	29.867	1.00	20.47	C
ATOM	937	C	GLY	B2006	3.802	22.634	28.914	1.00	19.98	C
ATOM	938	O	GLY	B2006	3.873	23.820	29.237	1.00	20.12	O
ATOM	939	N	HIS	B2007	4.235	22.175	27.741	1.00	19.33	N
ATOM	940	CA	HIS	B2007	4.789	23.031	26.686	1.00	18.80	C
ATOM	941	CB	HIS	B2007	6.301	23.191	26.832	1.00	18.37	C
ATOM	942	CG	HIS	B2007	6.945	23.945	25.708	1.00	18.59	C
ATOM	943	CD2	HIS	B2007	8.088	23.712	25.015	1.00	19.30	C
ATOM	944	ND1	HIS	B2007	6.447	25.138	25.226	1.00	18.65	N
ATOM	945	CE1	HIS	B2007	7.254	25.607	24.289	1.00	18.01	C
ATOM	946	NE2	HIS	B2007	8.259	24.763	24.143	1.00	18.26	N
ATOM	947	C	HIS	B2007	4.482	22.387	25.342	1.00	18.69	C
ATOM	948	O	HIS	B2007	4.731	21.197	25.146	1.00	17.82	O
ATOM	949	N	GLY	B2008	3.925	23.174	24.425	1.00	19.16	N
ATOM	950	CA	GLY	B2008	3.599	22.655	23.110	1.00	18.31	C
ATOM	951	C	GLY	B2008	3.703	23.724	22.043	1.00	18.66	C
ATOM	952	O	GLY	B2008	3.378	24.890	22.297	1.00	18.62	O
ATOM	953	N	ILE	B2009	4.175	23.336	20.858	1.00	18.18	N
ATOM	954	CA	ILE	B2009	4.282	24.257	19.736	1.00	18.56	C
ATOM	955	CB	ILE	B2009	5.747	24.562	19.351	1.00	18.23	C
ATOM	956	CG2	ILE	B2009	6.471	25.174	20.538	1.00	17.94	C
ATOM	957	CG1	ILE	B2009	6.440	23.285	18.847	1.00	17.91	C
ATOM	958	CD1	ILE	B2009	7.819	23.525	18.220	1.00	16.62	C
ATOM	959	C	ILE	B2009	3.601	23.657	18.513	1.00	19.50	C
ATOM	960	O	ILE	B2009	3.286	22.470	18.472	1.00	18.95	O
ATOM	961	N	ASP	B2010	3.356	24.492	17.518	1.00	20.39	N
ATOM	962	CA	ASP	B2010	2.751	24.015	16.298	1.00	21.57	C
ATOM	963	CB	ASP	B2010	1.251	23.773	16.481	1.00	22.40	C
ATOM	964	CG	ASP	B2010	0.635	22.980	15.317	1.00	23.74	C
ATOM	965	OD1	ASP	B2010	0.223	23.595	14.308	1.00	23.88	O
ATOM	966	OD2	ASP	B2010	0.576	21.731	15.415	1.00	24.74	O
ATOM	967	C	ASP	B2010	2.979	25.019	15.200	1.00	22.11	C
ATOM	968	O	ASP	B2010	3.032	26.224	15.443	1.00	22.03	O
ATOM	969	N	ILE	B2011	3.145	24.502	13.991	1.00	23.00	N
ATOM	970	CA	ILE	B2011	3.335	25.336	12.824	1.00	24.24	C
ATOM	971	CB	ILE	B2011	4.818	25.320	12.339	1.00	24.43	C
ATOM	972	CG2	ILE	B2011	5.258	23.905	11.972	1.00	24.62	C
ATOM	973	CG1	ILE	B2011	4.970	26.244	11.133	1.00	25.18	C
ATOM	974	CD1	ILE	B2011	6.404	26.433	10.684	1.00	26.49	C
ATOM	975	C	ILE	B2011	2.398	24.818	11.732	1.00	25.03	C
ATOM	976	O	ILE	B2011	2.257	23.609	11.532	1.00	24.85	O
ATOM	977	N	GLU	B2012	1.733	25.740	11.050	1.00	26.14	N
ATOM	978	CA	GLU	B2012	0.813	25.377	9.979	1.00	27.22	C
ATOM	979	CB	GLU	B2012	-0.636	25.692	10.369	1.00	28.06	C
ATOM	980	CG	GLU	B2012	-1.179	24.920	11.549	1.00	30.35	C
ATOM	981	CD	GLU	B2012	-1.237	23.427	11.301	1.00	31.85	C
ATOM	982	OE1	GLU	B2012	-1.472	23.026	10.133	1.00	32.85	O
ATOM	983	OE2	GLU	B2012	-1.065	22.660	12.278	1.00	31.85	O
ATOM	984	C	GLU	B2012	1.130	26.138	8.704	1.00	27.07	C
ATOM	985	O	GLU	B2012	1.558	27.294	8.738	1.00	26.78	O
ATOM	986	N	GLU	B2013	0.914	25.471	7.579	1.00	27.58	N
ATOM	987	CA	GLU	B2013	1.115	26.080	6.272	1.00	27.80	C
ATOM	988	CB	GLU	B2013	1.533	25.018	5.253	1.00	28.06	C

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ATOM     989   CG   GLU  B2013       1.806    25.553    3.851    1.00  29.06          C
ATOM     990   CD   GLU  B2013       2.105    24.447    2.858    0.05  28.78          C
ATOM     991   OE1  GLU  B2013       3.074    23.691    3.081    0.05  28.87          O
ATOM     992   OE2  GLU  B2013       1.370    24.335    1.856    0.05  28.90          O
ATOM     993   C    GLU  B2013      -0.268    26.626    5.939    1.00  27.67          C
ATOM     994   O    GLU  B2013      -1.250    25.894    5.982    1.00  27.29          O
ATOM     995   N    LEU  B2014      -0.350    27.916    5.644    1.00  28.07          N
ATOM     996   CA   LEU  B2014      -1.629    28.542    5.330    1.00  28.65          C
ATOM     997   CB   LEU  B2014      -1.426    30.023    4.986    1.00  28.56          C
ATOM     998   CG   LEU  B2014      -1.332    31.022    6.147    1.00  28.97          C
ATOM     999   CD1  LEU  B2014      -2.677    31.113    6.840    1.00  28.76          C
ATOM    1000   CD2  LEU  B2014      -0.260    30.593    7.139    1.00  28.89          C
ATOM    1001   C    LEU  B2014      -2.356    27.847    4.189    1.00  28.89          C
ATOM    1002   O    LEU  B2014      -3.584    27.758    4.189    1.00  28.92          O
ATOM    1003   N    ALA  B2015      -1.588    27.346    3.228    1.00  29.40          N
ATOM    1004   CA   ALA  B2015      -2.137    26.665    2.058    1.00  29.93          C
ATOM    1005   CB   ALA  B2015      -0.999    26.206    1.146    1.00  29.23          C
ATOM    1006   C    ALA  B2015      -3.033    25.483    2.401    1.00  30.15          C
ATOM    1007   O    ALA  B2015      -4.062    25.278    1.760    1.00  30.32          O
ATOM    1008   N    SER  B2016      -2.648    24.703    3.403    1.00  30.53          N
ATOM    1009   CA   SER  B2016      -3.445    23.544    3.776    1.00  31.47          C
ATOM    1010   CB   SER  B2016      -2.625    22.583    4.640    1.00  31.89          C
ATOM    1011   OG   SER  B2016      -2.229    23.193    5.846    1.00  33.02          O
ATOM    1012   C    SER  B2016      -4.735    23.946    4.487    1.00  31.84          C
ATOM    1013   O    SER  B2016      -5.741    23.243    4.391    1.00  31.71          O
ATOM    1014   N    ILE  B2017      -4.716    25.068    5.201    1.00  32.07          N
ATOM    1015   CA   ILE  B2017      -5.932    25.527    5.861    1.00  32.52          C
ATOM    1016   CB   ILE  B2017      -5.651    26.688    6.843    1.00  32.37          C
ATOM    1017   CG2  ILE  B2017      -6.973    27.246    7.385    1.00  32.53          C
ATOM    1018   CG1  ILE  B2017      -4.759    26.203    7.996    1.00  32.12          C
ATOM    1019   CD1  ILE  B2017      -5.399    25.165    8.894    1.00  31.06          C
ATOM    1020   C    ILE  B2017      -6.862    26.015    4.748    1.00  33.04          C
ATOM    1021   O    ILE  B2017      -8.084    25.862    4.821    1.00  32.69          O
ATOM    1022   N    GLU  B2018      -6.263    26.597    3.711    1.00  33.86          N
ATOM    1023   CA   GLU  B2018      -7.006    27.095    2.554    1.00  34.86          C
ATOM    1024   CB   GLU  B2018      -6.042    27.669    1.504    1.00  36.31          C
ATOM    1025   CG   GLU  B2018      -5.544    29.080    1.764    1.00  38.14          C
ATOM    1026   CD   GLU  B2018      -6.554    30.137    1.359    1.00  39.70          C
ATOM    1027   OE1  GLU  B2018      -7.673    29.764    0.937    1.00  40.41          O
ATOM    1028   OE2  GLU  B2018      -6.231    31.341    1.464    1.00  40.25          O
ATOM    1029   C    GLU  B2018      -7.782    25.947    1.918    1.00  34.57          C
ATOM    1030   O    GLU  B2018      -8.964    26.076    1.612    1.00  34.08          O
ATOM    1031   N    SER  B2019      -7.094    24.828    1.711    1.00  34.49          N
ATOM    1032   CA   SER  B2019      -7.705    23.650    1.103    1.00  34.60          C
ATOM    1033   CB   SER  B2019      -6.639    22.610    0.793    1.00  34.46          C
ATOM    1034   OG   SER  B2019      -5.712    23.150   -0.125    1.00  35.85          O
ATOM    1035   C    SER  B2019      -8.761    23.039    1.996    1.00  34.54          C
ATOM    1036   O    SER  B2019      -9.827    22.646    1.523    1.00  34.67          O
ATOM    1037   N    ALA  B2020      -8.463    22.965    3.290    1.00  34.29          N
ATOM    1038   CA   ALA  B2020      -9.395    22.402    4.251    1.00  34.25          C
ATOM    1039   CB   ALA  B2020      -8.811    22.471    5.650    1.00  33.91          C
ATOM    1040   C    ALA  B2020     -10.703    23.175    4.180    1.00  34.65          C
ATOM    1041   O    ALA  B2020     -11.778    22.579    4.133    1.00  34.60          O
ATOM    1042   N    VAL  B2021     -10.604    24.502    4.151    1.00  35.08          N
ATOM    1043   CA   VAL  B2021     -11.784    25.359    4.073    1.00  35.39          C
ATOM    1044   CB   VAL  B2021     -11.411    26.855    4.220    1.00  35.27          C
ATOM    1045   CG1  VAL  B2021     -12.608    27.732    3.884    1.00  34.79          C
ATOM   1046  CG2 VAL B2021     -10.951  27.136   5.637  1.00 35.33           C
ATOM   1047  C   VAL B2021     -12.526  25.174   2.756  1.00 36.00           C
ATOM   1048  O   VAL B2021     -13.746  24.985   2.749  1.00 35.93           O
ATOM   1049  N   THR B2022     -11.795  25.237   1.644  1.00 36.68           N
ATOM   1050  CA  THR B2022     -12.401  25.072   0.326  1.00 37.80           C
ATOM   1051  CB  THR B2022     -11.351  25.211  -0.813  1.00 38.05           C
ATOM   1052  OG1 THR B2022     -10.830  26.549  -0.839  1.00 37.71           O
ATOM   1053  CG2 THR B2022     -11.988  24.898  -2.166  1.00 37.87           C
ATOM   1054  C   THR B2022     -13.064  23.701   0.210  1.00 38.58           C
ATOM   1055  O   THR B2022     -14.204  23.584  -0.234  1.00 38.63           O
ATOM   1056  N   ARG B2023     -12.348  22.666   0.629  1.00 39.65           N
ATOM   1057  CA  ARG B2023     -12.864  21.306   0.563  1.00 41.03           C
ATOM   1058  CB  ARG B2023     -11.828  20.317   1.106  1.00 41.66           C
ATOM   1059  CG  ARG B2023     -11.891  18.939   0.452  1.00 43.04           C
ATOM   1060  CD  ARG B2023     -13.312  18.416   0.395  1.00 43.90           C
ATOM   1061  NE  ARG B2023     -13.406  17.090  -0.202  1.00 44.75           N
ATOM   1062  CZ  ARG B2023     -14.524  16.371  -0.231  1.00 45.34           C
ATOM   1063  NH1 ARG B2023     -15.638  16.862   0.302  1.00 45.03           N
ATOM   1064  NH2 ARG B2023     -14.527  15.157  -0.773  1.00 45.61           N
ATOM   1065  C   ARG B2023     -14.165  21.138   1.343  1.00 41.52           C
ATOM   1066  O   ARG B2023     -15.180  20.712   0.787  1.00 41.49           O
ATOM   1067  N   HIS B2024     -14.120  21.467   2.631  1.00 41.94           N
ATOM   1068  CA  HIS B2024     -15.274  21.343   3.511  1.00 42.45           C
ATOM   1069  CB  HIS B2024     -14.931  20.424   4.678  1.00 43.39           C
ATOM   1070  CG  HIS B2024     -14.516  19.050   4.255  1.00 44.50           C
ATOM   1071  CD2 HIS B2024     -13.294  18.468   4.191  1.00 44.72           C
ATOM   1072  ND1 HIS B2024     -15.411  18.115   3.777  1.00 45.05           N
ATOM   1073  CE1 HIS B2024     -14.758  17.018   3.436  1.00 45.22           C
ATOM   1074  NE2 HIS B2024     -13.473  17.206   3.677  1.00 45.24           N
ATOM   1075  C   HIS B2024     -15.713  22.697   4.040  1.00 42.58           C
ATOM   1076  O   HIS B2024     -14.934  23.412   4.672  1.00 42.87           O
ATOM   1077  N   GLU B2025     -16.967  23.050   3.781  1.00 42.39           N
ATOM   1078  CA  GLU B2025     -17.490  24.326   4.242  1.00 41.91           C
ATOM   1079  CB  GLU B2025     -18.732  24.732   3.437  1.00 43.59           C
ATOM   1080  CG  GLU B2025     -18.797  26.229   3.153  1.00 45.80           C
ATOM   1081  CD  GLU B2025     -20.117  26.675   2.544  1.00 47.26           C
ATOM   1082  OE1 GLU B2025     -20.610  26.003   1.603  1.00 47.52           O
ATOM   1083  OE2 GLU B2025     -20.653  27.710   3.006  1.00 48.07           O
ATOM   1084  C   GLU B2025     -17.848  24.211   5.712  1.00 40.39           C
ATOM   1085  O   GLU B2025     -18.172  25.203   6.356  1.00 40.62           O
ATOM   1086  N   GLY B2026     -17.789  22.993   6.238  1.00 38.87           N
ATOM   1087  CA  GLY B2026     -18.105  22.788   7.638  1.00 36.84           C
ATOM   1088  C   GLY B2026     -16.865  22.836   8.507  1.00 35.50           C
ATOM   1089  O   GLY B2026     -16.954  22.961   9.732  1.00 35.89           O
ATOM   1090  N   PHE B2027     -15.706  22.746   7.866  1.00 33.86           N
ATOM   1091  CA  PHE B2027     -14.416  22.752   8.549  1.00 32.08           C
ATOM   1092  CB  PHE B2027     -13.293  22.958   7.532  1.00 31.28           C
ATOM   1093  CG  PHE B2027     -11.926  22.896   8.128  1.00 29.92           C
ATOM   1094  CD1 PHE B2027     -11.396  21.682   8.555  1.00 28.97           C
ATOM   1095  CD2 PHE B2027     -11.176  24.054   8.293  1.00 29.17           C
ATOM   1096  CE1 PHE B2027     -10.143  21.623   9.135  1.00 28.66           C
ATOM   1097  CE2 PHE B2027      -9.918  24.006   8.875  1.00 28.77           C
ATOM   1098  CZ  PHE B2027      -9.399  22.790   9.298  1.00 28.68           C
ATOM   1099  C   PHE B2027     -14.294  23.801   9.651  1.00 31.46           C
ATOM   1100  O   PHE B2027     -14.059  23.465  10.815  1.00 31.23           O
ATOM   1101  N   ALA B2028     -14.454  25.067   9.278  1.00 30.51           N
ATOM   1102  CA  ALA B2028     -14.360  26.169  10.228  1.00 30.25           C
ATOM   1103  CB  ALA B2028     -14.624  27.487   9.517  1.00 30.53      C
ATOM   1104  C   ALA B2028     -15.305  26.030  11.421  1.00 30.13      C
ATOM   1105  O   ALA B2028     -14.926  26.308  12.561  1.00 29.80      O
ATOM   1106  N   LYS B2029     -16.533  25.600  11.160  1.00 30.02      N
ATOM   1107  CA  LYS B2029     -17.520  25.448  12.225  1.00 30.10      C
ATOM   1108  CB  LYS B2029     -18.882  25.053  11.637  1.00 30.49      C
ATOM   1109  CG  LYS B2029     -19.552  26.148  10.821  1.00 31.20      C
ATOM   1110  CD  LYS B2029     -20.765  25.618  10.074  0.05 30.87      C
ATOM   1111  CE  LYS B2029     -21.354  26.675   9.153  0.05 30.89      C
ATOM   1112  NZ  LYS B2029     -22.504  26.150   8.365  0.05 30.76      N
ATOM   1113  C   LYS B2029     -17.099  24.408  13.248  1.00 29.50      C
ATOM   1114  O   LYS B2029     -17.467  24.491  14.420  1.00 29.99      O
ATOM   1115  N   ARG B2030     -16.326  23.428  12.798  1.00 28.70      N
ATOM   1116  CA  ARG B2030     -15.877  22.348  13.667  1.00 27.83      C
ATOM   1117  CB  ARG B2030     -15.616  21.093  12.822  1.00 27.88      C
ATOM   1118  CG  ARG B2030     -16.867  20.503  12.193  0.05 27.87      C
ATOM   1119  CD  ARG B2030     -16.543  19.293  11.332  0.05 27.87      C
ATOM   1120  NE  ARG B2030     -15.748  19.648  10.160  0.05 27.89      N
ATOM   1121  CZ  ARG B2030     -15.379  18.785   9.218  0.05 27.88      C
ATOM   1122  NH1 ARG B2030     -15.732  17.510   9.309  0.05 27.89      N
ATOM   1123  NH2 ARG B2030     -14.658  19.196   8.184  0.05 27.87      N
ATOM   1124  C   ARG B2030     -14.631  22.698  14.477  1.00 26.83      C
ATOM   1125  O   ARG B2030     -14.391  22.134  15.541  1.00 26.57      O
ATOM   1126  N   VAL B2031     -13.854  23.644  13.965  1.00 25.79      N
ATOM   1127  CA  VAL B2031     -12.610  24.073  14.596  1.00 24.76      C
ATOM   1128  CB  VAL B2031     -11.565  24.442  13.505  1.00 24.82      C
ATOM   1129  CG1 VAL B2031     -10.365  25.139  14.121  1.00 24.72      C
ATOM   1130  CG2 VAL B2031     -11.125  23.184  12.779  1.00 24.93      C
ATOM   1131  C   VAL B2031     -12.806  25.263  15.523  1.00 23.81      C
ATOM   1132  O   VAL B2031     -12.166  25.365  16.568  1.00 22.82      O
ATOM   1133  N   LEU B2032     -13.709  26.149  15.127  1.00 23.54      N
ATOM   1134  CA  LEU B2032     -13.997  27.361  15.873  1.00 23.22      C
ATOM   1135  CB  LEU B2032     -14.157  28.528  14.893  1.00 22.85      C
ATOM   1136  CG  LEU B2032     -12.924  28.789  14.022  1.00 22.24      C
ATOM   1137  CD1 LEU B2032     -13.210  29.906  13.026  1.00 22.11      C
ATOM   1138  CD2 LEU B2032     -11.747  29.152  14.918  1.00 22.17      C
ATOM   1139  C   LEU B2032     -15.233  27.256  16.744  1.00 23.32      C
ATOM   1140  O   LEU B2032     -16.122  26.454  16.482  1.00 23.42      O
ATOM   1141  N   THR B2033     -15.263  28.060  17.803  1.00 23.69      N
ATOM   1142  CA  THR B2033     -16.404  28.105  18.713  1.00 23.81      C
ATOM   1143  CB  THR B2033     -16.002  28.538  20.129  1.00 23.49      C
ATOM   1144  OG1 THR B2033     -15.442  29.858  20.074  1.00 23.22      O
ATOM   1145  CG2 THR B2033     -15.004  27.571  20.726  1.00 22.82      C
ATOM   1146  C   THR B2033     -17.312  29.191  18.162  1.00 24.17      C
ATOM   1147  O   THR B2033     -16.915  29.930  17.264  1.00 24.05      O
ATOM   1148  N   ALA B2034     -18.516  29.302  18.709  1.00 24.73      N
ATOM   1149  CA  ALA B2034     -19.456  30.322  18.246  1.00 25.88      C
ATOM   1150  CB  ALA B2034     -20.704  30.326  19.127  1.00 25.52      C
ATOM   1151  C   ALA B2034     -18.793  31.704  18.245  1.00 26.34      C
ATOM   1152  O   ALA B2034     -18.815  32.409  17.231  1.00 26.66      O
ATOM   1153  N   LEU B2035     -18.194  32.083  19.374  1.00 27.02      N
ATOM   1154  CA  LEU B2035     -17.518  33.375  19.477  1.00 27.85      C
ATOM   1155  CB  LEU B2035     -16.868  33.549  20.852  1.00 28.57      C
ATOM   1156  CG  LEU B2035     -17.760  33.942  22.028  1.00 29.51      C
ATOM   1157  CD1 LEU B2035     -16.879  34.241  23.246  1.00 29.47      C
ATOM   1158  CD2 LEU B2035     -18.596  35.181  21.648  1.00 29.85      C
ATOM   1159  C   LEU B2035     -16.445  33.516  18.405  1.00 28.07      C
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ATOM   1160  O    LEU B2035      -16.395  34.516  17.687  1.00 28.48           O
ATOM   1161  N    GLU B2036      -15.578  32.518  18.308  1.00 27.90           N
ATOM   1162  CA   GLU B2036      -14.518  32.542  17.310  1.00 27.73           C
ATOM   1163  CB   GLU B2036      -13.666  31.270  17.414  1.00 26.50           C
ATOM   1164  CG   GLU B2036      -12.568  31.339  18.474  1.00 25.25           C
ATOM   1165  CD   GLU B2036      -11.969  29.976  18.799  1.00 24.47           C
ATOM   1166  OE1  GLU B2036      -10.797  29.925  19.226  1.00 23.46           O
ATOM   1167  OE2  GLU B2036      -12.676  28.957  18.636  1.00 24.23           O
ATOM   1168  C    GLU B2036      -15.073  32.686  15.895  1.00 28.15           C
ATOM   1169  O    GLU B2036      -14.507  33.403  15.083  1.00 28.18           O
ATOM   1170  N    MET B2037      -16.169  31.990  15.604  1.00 29.30           N
ATOM   1171  CA   MET B2037      -16.800  32.038  14.283  1.00 30.55           C
ATOM   1172  CB   MET B2037      -17.984  31.069  14.211  1.00 30.95           C
ATOM   1173  CG   MET B2037      -17.607  29.662  13.809  1.00 31.93           C
ATOM   1174  SD   MET B2037      -16.851  29.650  12.173  1.00 33.36           S
ATOM   1175  CE   MET B2037      -18.331  29.638  11.166  1.00 32.65           C
ATOM   1176  C    MET B2037      -17.286  33.436  13.934  1.00 31.15           C
ATOM   1177  O    MET B2037      -17.206  33.854  12.785  1.00 30.76           O
ATOM   1178  N    GLU B2038      -17.789  34.153  14.934  1.00 32.42           N
ATOM   1179  CA   GLU B2038      -18.278  35.513  14.730  1.00 33.88           C
ATOM   1180  CB   GLU B2038      -18.841  36.062  16.044  1.00 35.07           C
ATOM   1181  CG   GLU B2038      -19.432  37.455  15.931  1.00 37.91           C
ATOM   1182  CD   GLU B2038      -20.528  37.714  16.955  1.00 39.72           C
ATOM   1183  OE1  GLU B2038      -21.587  37.050  16.864  1.00 40.71           O
ATOM   1184  OE2  GLU B2038      -20.333  38.576  17.846  1.00 40.42           O
ATOM   1185  C    GLU B2038      -17.163  36.418  14.198  1.00 34.07           C
ATOM   1186  O    GLU B2038      -17.406  37.320  13.397  1.00 33.98           O
ATOM   1187  N    ARG B2039      -15.936  36.181  14.649  1.00 34.44           N
ATOM   1188  CA   ARG B2039      -14.810  36.972  14.179  1.00 35.18           C
ATOM   1189  CB   ARG B2039      -13.630  36.856  15.153  1.00 35.30           C
ATOM   1190  CG   ARG B2039      -12.370  37.601  14.720  1.00 35.26           C
ATOM   1191  CD   ARG B2039      -12.590  39.099  14.608  0.05 35.23           C
ATOM   1192  NE   ARG B2039      -11.358  39.788  14.235  0.05 35.24           N
ATOM   1193  CZ   ARG B2039      -11.260  41.099  14.040  0.05 35.24           C
ATOM   1194  NH1  ARG B2039      -10.095  41.634  13.703  0.05 35.27           N
ATOM   1195  NH2  ARG B2039      -12.325  41.875  14.182  0.05 35.27           N
ATOM   1196  C    ARG B2039      -14.418  36.445  12.797  1.00 35.34           C
ATOM   1197  O    ARG B2039      -14.167  37.217  11.868  1.00 35.66           O
ATOM   1198  N    PHE B2040      -14.382  35.123  12.673  1.00 35.29           N
ATOM   1199  CA   PHE B2040      -14.042  34.473  11.414  1.00 35.77           C
ATOM   1200  CB   PHE B2040      -14.241  32.961  11.545  1.00 34.55           C
ATOM   1201  CG   PHE B2040      -13.996  32.201  10.271  1.00 33.98           C
ATOM   1202  CD1  PHE B2040      -12.716  32.122   9.725  1.00 33.52           C
ATOM   1203  CD2  PHE B2040      -15.045  31.564   9.614  1.00 33.68           C
ATOM   1204  CE1  PHE B2040      -12.488  31.420   8.548  1.00 33.41           C
ATOM   1205  CE2  PHE B2040      -14.828  30.861   8.435  1.00 33.27           C
ATOM   1206  CZ   PHE B2040      -13.549  30.787   7.899  1.00 33.46           C
ATOM   1207  C    PHE B2040      -14.916  34.997  10.268  1.00 36.68           C
ATOM   1208  O    PHE B2040      -14.445  35.199   9.144  1.00 36.38           O
ATOM   1209  N    THR B2041      -16.191  35.221  10.561  1.00 37.87           N
ATOM   1210  CA   THR B2041      -17.121  35.692   9.546  1.00 39.25           C
ATOM   1211  CB   THR B2041      -18.580  35.450   9.981  1.00 39.24           C
ATOM   1212  OG1  THR B2041      -18.811  34.041  10.115  1.00 39.45           O
ATOM   1213  CG2  THR B2041      -19.540  36.001   8.943  1.00 40.16           C
ATOM   1214  C    THR B2041      -16.947  37.159   9.159  1.00 39.72           C
ATOM   1215  O    THR B2041      -17.496  37.598   8.157  1.00 40.46           O
ATOM   1216  N    SER B2042      -16.175  37.915   9.930  1.00 40.14           N
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ATOM   1217  CA  SER B2042     -15.970  39.327   9.609  1.00 40.54           C
ATOM   1218  CB  SER B2042     -16.159  40.184  10.858  1.00 40.81           C
ATOM   1219  OG  SER B2042     -17.449  39.989  11.399  1.00 42.55           O
ATOM   1220  C   SER B2042     -14.588  39.596   9.033  1.00 40.43           C
ATOM   1221  O   SER B2042     -14.039  40.686   9.218  1.00 40.73           O
ATOM   1222  N   LEU B2043     -14.031  38.615   8.327  1.00 39.91           N
ATOM   1223  CA  LEU B2043     -12.698  38.764   7.758  1.00 39.34           C
ATOM   1224  CB  LEU B2043     -11.663  38.115   8.683  1.00 38.78           C
ATOM   1225  CG  LEU B2043     -11.484  38.654  10.105  1.00 38.39           C
ATOM   1226  CD1 LEU B2043     -10.642  37.666  10.913  1.00 37.70           C
ATOM   1227  CD2 LEU B2043     -10.822  40.035  10.075  1.00 37.83           C
ATOM   1228  C   LEU B2043     -12.555  38.165   6.360  1.00 39.45           C
ATOM   1229  O   LEU B2043     -11.502  38.317   5.732  1.00 39.47           O
ATOM   1230  N   LYS B2044     -13.594  37.478   5.884  1.00 38.98           N
ATOM   1231  CA  LYS B2044     -13.569  36.850   4.556  1.00 38.77           C
ATOM   1232  CB  LYS B2044     -14.875  37.145   3.807  1.00 39.18           C
ATOM   1233  CG  LYS B2044     -14.988  36.486   2.442  0.05 38.97           C
ATOM   1234  CD  LYS B2044     -15.072  34.973   2.556  0.05 38.99           C
ATOM   1235  CE  LYS B2044     -15.263  34.332   1.191  0.05 38.96           C
ATOM   1236  NZ  LYS B2044     -15.382  32.851   1.284  0.05 38.96           N
ATOM   1237  C   LYS B2044     -12.383  37.340   3.720  1.00 38.31           C
ATOM   1238  O   LYS B2044     -12.253  38.538   3.458  1.00 38.14           O
ATOM   1239  N   GLY B2045     -11.522  36.412   3.310  1.00 37.92           N
ATOM   1240  CA  GLY B2045     -10.351  36.767   2.521  1.00 36.95           C
ATOM   1241  C   GLY B2045      -9.108  36.124   3.108  1.00 36.64           C
ATOM   1242  O   GLY B2045      -9.207  35.141   3.845  1.00 37.08           O
ATOM   1243  N   ARG B2046      -7.935  36.665   2.807  1.00 35.68           N
ATOM   1244  CA  ARG B2046      -6.703  36.084   3.332  1.00 35.35           C
ATOM   1245  CB  ARG B2046      -5.476  36.804   2.750  1.00 35.15           C
ATOM   1246  CG  ARG B2046      -4.150  36.148   3.087  0.05 35.14           C
ATOM   1247  CD  ARG B2046      -4.081  34.743   2.515  0.05 35.11           C
ATOM   1248  NE  ARG B2046      -2.811  34.090   2.811  0.05 35.11           N
ATOM   1249  CZ  ARG B2046      -2.504  32.853   2.436  0.05 35.09           C
ATOM   1250  NH1 ARG B2046      -1.323  32.338   2.748  0.05 35.09           N
ATOM   1251  NH2 ARG B2046      -3.377  32.130   1.748  0.05 35.07           N
ATOM   1252  C   ARG B2046      -6.661  36.147   4.859  1.00 34.86           C
ATOM   1253  O   ARG B2046      -6.273  35.184   5.522  1.00 34.07           O
ATOM   1254  N   ARG B2047      -7.068  37.289   5.407  1.00 34.76           N
ATOM   1255  CA  ARG B2047      -7.074  37.503   6.852  1.00 35.00           C
ATOM   1256  CB  ARG B2047      -7.559  38.918   7.156  1.00 35.75           C
ATOM   1257  CG  ARG B2047      -6.762  39.984   6.434  1.00 37.57           C
ATOM   1258  CD  ARG B2047      -7.345  41.342   6.697  1.00 39.01           C
ATOM   1259  NE  ARG B2047      -8.743  41.398   6.289  1.00 40.76           N
ATOM   1260  CZ  ARG B2047      -9.663  42.124   6.915  1.00 41.64           C
ATOM   1261  NH1 ARG B2047      -9.322  42.852   7.974  1.00 41.91           N
ATOM   1262  NH2 ARG B2047     -10.924  42.110   6.497  1.00 42.15           N
ATOM   1263  C   ARG B2047      -7.959  36.483   7.566  1.00 34.24           C
ATOM   1264  O   ARG B2047      -7.681  36.070   8.692  1.00 34.10           O
ATOM   1265  N   GLN B2048      -9.030  36.085   6.900  1.00 33.32           N
ATOM   1266  CA  GLN B2048      -9.944  35.112   7.460  1.00 32.27           C
ATOM   1267  CB  GLN B2048     -11.138  34.961   6.531  1.00 32.92           C
ATOM   1268  CG  GLN B2048     -12.281  34.193   7.115  1.00 33.21           C
ATOM   1269  CD  GLN B2048     -13.323  33.871   6.077  1.00 33.65           C
ATOM   1270  OE1 GLN B2048     -13.016  33.274   5.044  1.00 34.07           O
ATOM   1271  NE2 GLN B2048     -14.567  34.258   6.343  1.00 33.98           N
ATOM   1272  C   GLN B2048      -9.224  33.772   7.620  1.00 31.20           C
ATOM   1273  O   GLN B2048      -9.402  33.075   8.615  1.00 30.73           O
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ATOM    1274  N   ILE B2049      -8.405  33.419   6.634  1.00 29.96           N
ATOM    1275  CA  ILE B2049      -7.661  32.170   6.682  1.00 28.94           C
ATOM    1276  CB  ILE B2049      -7.007  31.856   5.313  1.00 28.51           C
ATOM    1277  CG2 ILE B2049      -6.069  30.658   5.438  1.00 27.59           C
ATOM    1278  CG1 ILE B2049      -8.096  31.573   4.267  1.00 28.47           C
ATOM    1279  CD1 ILE B2049      -8.950  30.333   4.553  1.00 27.80           C
ATOM    1280  C   ILE B2049      -6.574  32.198   7.759  1.00 28.73           C
ATOM    1281  O   ILE B2049      -6.353  31.206   8.463  1.00 28.34           O
ATOM    1282  N   GLU B2050      -5.896  33.336   7.879  1.00 28.38           N
ATOM    1283  CA  GLU B2050      -4.833  33.494   8.859  1.00 28.07           C
ATOM    1284  CB  GLU B2050      -4.151  34.848   8.665  1.00 29.65           C
ATOM    1285  CG  GLU B2050      -3.799  35.103   7.200  1.00 32.92           C
ATOM    1286  CD  GLU B2050      -2.865  36.279   6.995  1.00 34.62           C
ATOM    1287  OE1 GLU B2050      -3.232  37.416   7.392  1.00 35.24           O
ATOM    1288  OE2 GLU B2050      -1.762  36.055   6.430  1.00 35.19           O
ATOM    1289  C   GLU B2050      -5.416  33.374  10.260  1.00 26.78           C
ATOM    1290  O   GLU B2050      -4.812  32.768  11.150  1.00 26.09           O
ATOM    1291  N   TYR B2051      -6.600  33.944  10.453  1.00 25.41           N
ATOM    1292  CA  TYR B2051      -7.251  33.868  11.749  1.00 24.34           C
ATOM    1293  CB  TYR B2051      -8.535  34.703  11.741  1.00 23.37           C
ATOM    1294  CG  TYR B2051      -9.316  34.618  13.024  1.00 22.77           C
ATOM    1295  CD1 TYR B2051     -10.347  33.695  13.169  1.00 22.86           C
ATOM    1296  CE1 TYR B2051     -11.026  33.559  14.369  1.00 23.29           C
ATOM    1297  CD2 TYR B2051      -8.984  35.413  14.116  1.00 22.81           C
ATOM    1298  CE2 TYR B2051      -9.657  35.284  15.332  1.00 23.14           C
ATOM    1299  CZ  TYR B2051     -10.677  34.350  15.450  1.00 23.43           C
ATOM    1300  OH  TYR B2051     -11.332  34.186  16.649  1.00 23.03           O
ATOM    1301  C   TYR B2051      -7.550  32.400  12.086  1.00 24.05           C
ATOM    1302  O   TYR B2051      -7.176  31.910  13.154  1.00 24.52           O
ATOM    1303  N   LEU B2052      -8.211  31.700  11.170  1.00 23.25           N
ATOM    1304  CA  LEU B2052      -8.541  30.291  11.364  1.00 22.91           C
ATOM    1305  CB  LEU B2052      -9.274  29.748  10.133  1.00 22.55           C
ATOM    1306  CG  LEU B2052      -9.598  28.247  10.086  1.00 22.85           C
ATOM    1307  CD1 LEU B2052     -10.345  27.814  11.343  1.00 21.95           C
ATOM    1308  CD2 LEU B2052     -10.436  27.957   8.835  1.00 22.89           C
ATOM    1309  C   LEU B2052      -7.284  29.457  11.622  1.00 22.68           C
ATOM    1310  O   LEU B2052      -7.232  28.681  12.571  1.00 22.94           O
ATOM    1311  N   ALA B2053      -6.285  29.612  10.761  1.00 22.31           N
ATOM    1312  CA  ALA B2053      -5.024  28.897  10.884  1.00 21.99           C
ATOM    1313  CB  ALA B2053      -4.072  29.332   9.774  1.00 21.32           C
ATOM    1314  C   ALA B2053      -4.397  29.180  12.244  1.00 22.13           C
ATOM    1315  O   ALA B2053      -3.805  28.295  12.868  1.00 21.87           O
ATOM    1316  N   GLY B2054      -4.532  30.427  12.688  1.00 21.95           N
ATOM    1317  CA  GLY B2054      -3.981  30.829  13.963  1.00 21.46           C
ATOM    1318  C   GLY B2054      -4.654  30.111  15.107  1.00 21.35           C
ATOM    1319  O   GLY B2054      -3.986  29.678  16.049  1.00 21.19           O
ATOM    1320  N   ARG B2055      -5.974  29.976  15.040  1.00 20.89           N
ATOM    1321  CA  ARG B2055      -6.681  29.290  16.114  1.00 20.89           C
ATOM    1322  CB  ARG B2055      -8.191  29.543  16.034  1.00 20.27           C
ATOM    1323  CG  ARG B2055      -8.685  30.688  16.934  1.00 19.89           C
ATOM    1324  CD  ARG B2055      -7.926  31.986  16.664  1.00 20.08           C
ATOM    1325  NE  ARG B2055      -8.265  33.046  17.609  1.00 19.79           N
ATOM    1326  CZ  ARG B2055      -7.634  34.216  17.668  1.00 20.91           C
ATOM    1327  NH1 ARG B2055      -6.626  34.473  16.832  1.00 20.64           N
ATOM    1328  NH2 ARG B2055      -8.009  35.135  18.555  1.00 20.13           N
ATOM    1329  C   ARG B2055      -6.383  27.796  16.086  1.00 20.73           C
ATOM    1330  O   ARG B2055      -6.239  27.169  17.136  1.00 20.29           O
ATOM   1331  N   TRP B2056      -6.273  27.235  14.884  1.00 20.69           N
ATOM   1332  CA  TRP B2056      -5.976  25.817  14.742  1.00 20.72           C
ATOM   1333  CB  TRP B2056      -5.992  25.408  13.262  1.00 21.90           C
ATOM   1334  CG  TRP B2056      -5.402  24.051  13.020  1.00 23.77           C
ATOM   1335  CD2 TRP B2056      -6.116  22.814  12.903  1.00 24.30           C
ATOM   1336  CE2 TRP B2056      -5.151  21.780  12.814  1.00 24.91           C
ATOM   1337  CE3 TRP B2056      -7.473  22.478  12.869  1.00 24.91           C
ATOM   1338  CD1 TRP B2056      -4.065  23.727  12.983  1.00 23.97           C
ATOM   1339  NE1 TRP B2056      -3.912  22.365  12.864  1.00 24.86           N
ATOM   1340  CZ2 TRP B2056      -5.505  20.429  12.697  1.00 25.50           C
ATOM   1341  CZ3 TRP B2056      -7.829  21.131  12.751  1.00 26.26           C
ATOM   1342  CH2 TRP B2056      -6.843  20.122  12.667  1.00 26.22           C
ATOM   1343  C   TRP B2056      -4.603  25.547  15.348  1.00 20.41           C
ATOM   1344  O   TRP B2056      -4.409  24.582  16.093  1.00 20.04           O
ATOM   1345  N   SER B2057      -3.654  26.415  15.025  1.00 19.64           N
ATOM   1346  CA  SER B2057      -2.298  26.282  15.533  1.00 19.83           C
ATOM   1347  CB  SER B2057      -1.395  27.339  14.898  1.00 20.26           C
ATOM   1348  OG  SER B2057      -0.057  27.136  15.303  1.00 22.97           O
ATOM   1349  C   SER B2057      -2.239  26.402  17.062  1.00 18.86           C
ATOM   1350  O   SER B2057      -1.548  25.636  17.725  1.00 18.27           O
ATOM   1351  N   ALA B2058      -2.968  27.367  17.613  1.00 18.16           N
ATOM   1352  CA  ALA B2058      -2.996  27.566  19.058  1.00 17.01           C
ATOM   1353  CB  ALA B2058      -3.767  28.826  19.388  1.00 16.89           C
ATOM   1354  C   ALA B2058      -3.623  26.365  19.781  1.00 16.76           C
ATOM   1355  O   ALA B2058      -3.087  25.890  20.783  1.00 15.81           O
ATOM   1356  N   LYS B2059      -4.755  25.884  19.272  1.00 16.40           N
ATOM   1357  CA  LYS B2059      -5.446  24.746  19.883  1.00 17.29           C
ATOM   1358  CB  LYS B2059      -6.815  24.547  19.217  1.00 16.13           C
ATOM   1359  CG  LYS B2059      -7.751  25.730  19.498  1.00 15.32           C
ATOM   1360  CD  LYS B2059      -9.168  25.536  18.996  1.00 14.90           C
ATOM   1361  CE  LYS B2059     -10.011  26.783  19.319  1.00 13.82           C
ATOM   1362  NZ  LYS B2059     -11.432  26.637  18.937  1.00 11.65           N
ATOM   1363  C   LYS B2059      -4.620  23.464  19.826  1.00 17.91           C
ATOM   1364  O   LYS B2059      -4.640  22.656  20.748  1.00 16.96           O
ATOM   1365  N   GLU B2060      -3.879  23.293  18.738  1.00 19.43           N
ATOM   1366  CA  GLU B2060      -3.043  22.123  18.585  1.00 20.86           C
ATOM   1367  CB  GLU B2060      -2.516  22.046  17.146  1.00 22.77           C
ATOM   1368  CG  GLU B2060      -1.964  20.691  16.759  1.00 26.37           C
ATOM   1369  CD  GLU B2060      -2.982  19.574  16.959  1.00 29.21           C
ATOM   1370  OE1 GLU B2060      -4.047  19.602  16.287  1.00 29.92           O
ATOM   1371  OE2 GLU B2060      -2.720  18.670  17.795  1.00 30.31           O
ATOM   1372  C   GLU B2060      -1.889  22.256  19.593  1.00 20.86           C
ATOM   1373  O   GLU B2060      -1.556  21.302  20.307  1.00 20.96           O
ATOM   1374  N   ALA B2061      -1.299  23.447  19.661  1.00 20.25           N
ATOM   1375  CA  ALA B2061      -0.191  23.697  20.580  1.00 20.38           C
ATOM   1376  CB  ALA B2061       0.348  25.139  20.411  1.00 19.50           C
ATOM   1377  C   ALA B2061      -0.655  23.464  22.015  1.00 20.28           C
ATOM   1378  O   ALA B2061       0.103  22.952  22.841  1.00 20.05           O
ATOM   1379  N   PHE B2062      -1.896  23.832  22.313  1.00 20.49           N
ATOM   1380  CA  PHE B2062      -2.419  23.620  23.659  1.00 21.41           C
ATOM   1381  CB  PHE B2062      -3.738  24.382  23.880  1.00 21.26           C
ATOM   1382  CG  PHE B2062      -4.350  24.142  25.242  1.00 21.63           C
ATOM   1383  CD1 PHE B2062      -5.134  23.015  25.481  1.00 21.14           C
ATOM   1384  CD2 PHE B2062      -4.092  25.009  26.297  1.00 21.77           C
ATOM   1385  CE1 PHE B2062      -5.646  22.756  26.745  1.00 21.47           C
ATOM   1386  CE2 PHE B2062      -4.603  24.757  27.576  1.00 22.09           C
ATOM   1387  CZ  PHE B2062      -5.382  23.627  27.799  1.00 21.52           C
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ATOM   1388  C   PHE B2062      -2.630  22.133  23.938  1.00 22.03           C
ATOM   1389  O   PHE B2062      -2.303  21.655  25.022  1.00 22.28           O
ATOM   1390  N   SER B2063      -3.183  21.406  22.970  1.00 22.94           N
ATOM   1391  CA  SER B2063      -3.403  19.972  23.135  1.00 24.34           C
ATOM   1392  CB  SER B2063      -4.120  19.379  21.921  1.00 24.96           C
ATOM   1393  OG  SER B2063      -5.510  19.618  21.995  1.00 26.96           O
ATOM   1394  C   SER B2063      -2.089  19.231  23.338  1.00 24.82           C
ATOM   1395  O   SER B2063      -2.053  18.192  23.989  1.00 24.78           O
ATOM   1396  N   LYS B2064      -1.010  19.754  22.778  1.00 24.97           N
ATOM   1397  CA  LYS B2064       0.266  19.091  22.952  1.00 26.19           C
ATOM   1398  CB  LYS B2064       1.201  19.454  21.802  1.00 25.92           C
ATOM   1399  CG  LYS B2064       0.723  18.846  20.496  1.00 26.10           C
ATOM   1400  CD  LYS B2064       1.437  19.406  19.293  1.00 26.40           C
ATOM   1401  CE  LYS B2064       2.890  19.016  19.272  1.00 25.79           C
ATOM   1402  NZ  LYS B2064       3.444  19.339  17.935  1.00 26.57           N
ATOM   1403  C   LYS B2064       0.860  19.447  24.312  1.00 27.18           C
ATOM   1404  O   LYS B2064       1.443  18.593  24.978  1.00 27.11           O
ATOM   1405  N   ALA B2065       0.680  20.696  24.734  1.00 28.10           N
ATOM   1406  CA  ALA B2065       1.175  21.142  26.030  1.00 29.62           C
ATOM   1407  CB  ALA B2065       0.851  22.617  26.241  1.00 29.09           C
ATOM   1408  C   ALA B2065       0.520  20.309  27.128  1.00 30.86           C
ATOM   1409  O   ALA B2065       1.121  20.062  28.170  1.00 30.13           O
ATOM   1410  N   MET B2066      -0.721  19.890  26.892  1.00 32.95           N
ATOM   1411  CA  MET B2066      -1.449  19.079  27.866  1.00 35.41           C
ATOM   1412  CB  MET B2066      -2.957  19.167  27.626  1.00 35.78           C
ATOM   1413  CG  MET B2066      -3.588  20.479  28.047  1.00 36.88           C
ATOM   1414  SD  MET B2066      -3.734  20.673  29.828  1.00 38.18           S
ATOM   1415  CE  MET B2066      -5.497  20.288  30.048  1.00 38.92           C
ATOM   1416  C   MET B2066      -1.010  17.621  27.783  1.00 36.81           C
ATOM   1417  O   MET B2066      -1.414  16.797  28.595  1.00 36.82           O
ATOM   1418  N   GLY B2067      -0.178  17.311  26.798  1.00 38.52           N
ATOM   1419  CA  GLY B2067       0.292  15.950  26.644  1.00 41.07           C
ATOM   1420  C   GLY B2067      -0.794  14.998  26.187  1.00 42.84           C
ATOM   1421  O   GLY B2067      -1.321  14.214  26.979  1.00 43.50           O
ATOM   1422  N   THR B2068      -1.140  15.077  24.908  1.00 44.30           N
ATOM   1423  CA  THR B2068      -2.152  14.206  24.322  1.00 45.93           C
ATOM   1424  CB  THR B2068      -3.410  14.994  23.903  1.00 45.92           C
ATOM   1425  OG1 THR B2068      -3.075  15.921  22.861  1.00 46.12           O
ATOM   1426  CG2 THR B2068      -3.972  15.758  25.093  1.00 46.09           C
ATOM   1427  C   THR B2068      -1.501  13.593  23.088  1.00 47.07           C
ATOM   1428  O   THR B2068      -2.151  12.918  22.287  1.00 47.09           O
ATOM   1429  N   GLY B2069      -0.202  13.862  22.957  1.00 48.53           N
ATOM   1430  CA  GLY B2069       0.599  13.356  21.853  1.00 49.83           C
ATOM   1431  C   GLY B2069      -0.085  13.307  20.503  1.00 50.67           C
ATOM   1432  O   GLY B2069      -0.047  14.274  19.741  1.00 51.10           O
ATOM   1433  N   ILE B2070      -0.699  12.166  20.208  1.00 51.17           N
ATOM   1434  CA  ILE B2070      -1.405  11.948  18.952  1.00 51.53           C
ATOM   1435  CB  ILE B2070      -1.574  10.427  18.668  1.00 51.94           C
ATOM   1436  CG2 ILE B2070      -0.221   9.804  18.341  1.00 51.87           C
ATOM   1437  CG1 ILE B2070      -2.217   9.737  19.882  1.00 52.15           C
ATOM   1438  CD1 ILE B2070      -2.470   8.249  19.712  1.00 52.43           C
ATOM   1439  C   ILE B2070      -2.792  12.590  18.979  1.00 51.42           C
ATOM   1440  O   ILE B2070      -3.074  13.534  18.232  1.00 51.57           O
ATOM   1441  N   SER B2071      -3.653  12.068  19.847  1.00 51.02           N
ATOM   1442  CA  SER B2071      -5.013  12.566  19.967  1.00 50.61           C
ATOM   1443  CB  SER B2071      -5.803  11.680  20.938  1.00 50.61           C
ATOM   1444  OG  SER B2071      -5.007  11.299  22.044  1.00 50.73           O
ATOM   1445  C    SER B2071      -5.064  14.030  20.404  1.00 50.07           C
ATOM   1446  O    SER B2071      -4.042  14.625  20.771  1.00 49.91           O
ATOM   1447  N    LYS B2072      -6.258  14.612  20.340  1.00 49.03           N
ATOM   1448  CA   LYS B2072      -6.440  16.004  20.728  1.00 47.71           C
ATOM   1449  CB   LYS B2072      -6.637  16.898  19.495  1.00 48.58           C
ATOM   1450  CG   LYS B2072      -5.733  16.597  18.312  1.00 49.59           C
ATOM   1451  CD   LYS B2072      -6.215  17.358  17.087  1.00 50.30           C
ATOM   1452  CE   LYS B2072      -5.500  16.909  15.820  1.00 50.97           C
ATOM   1453  NZ   LYS B2072      -6.051  17.588  14.610  1.00 51.33           N
ATOM   1454  C    LYS B2072      -7.670  16.146  21.610  1.00 46.22           C
ATOM   1455  O    LYS B2072      -8.484  15.229  21.742  1.00 46.03           O
ATOM   1456  N    LEU B2073      -7.787  17.322  22.208  1.00 44.70           N
ATOM   1457  CA   LEU B2073      -8.915  17.658  23.048  1.00 42.68           C
ATOM   1458  CB   LEU B2073      -8.540  18.812  23.975  1.00 42.47           C
ATOM   1459  CG   LEU B2073      -7.416  18.504  24.959  1.00 42.08           C
ATOM   1460  CD1  LEU B2073      -6.916  19.781  25.594  1.00 42.04           C
ATOM   1461  CD2  LEU B2073      -7.925  17.543  26.010  1.00 42.14           C
ATOM   1462  C    LEU B2073      -9.999  18.116  22.083  1.00 41.35           C
ATOM   1463  O    LEU B2073      -9.750  18.273  20.881  1.00 41.21           O
ATOM   1464  N    GLY B2074     -11.203  18.312  22.595  1.00 39.49           N
ATOM   1465  CA   GLY B2074     -12.252  18.791  21.727  1.00 37.51           C
ATOM   1466  C    GLY B2074     -11.852  20.211  21.364  1.00 35.85           C
ATOM   1467  O    GLY B2074     -11.493  20.998  22.240  1.00 35.43           O
ATOM   1468  N    PHE B2075     -11.878  20.548  20.082  1.00 33.89           N
ATOM   1469  CA   PHE B2075     -11.524  21.900  19.704  1.00 32.41           C
ATOM   1470  CB   PHE B2075     -11.287  21.990  18.194  1.00 32.43           C
ATOM   1471  CG   PHE B2075      -9.846  21.778  17.802  1.00 32.87           C
ATOM   1472  CD1  PHE B2075      -8.952  21.151  18.682  1.00 33.28           C
ATOM   1473  CD2  PHE B2075      -9.379  22.191  16.557  1.00 33.06           C
ATOM   1474  CE1  PHE B2075      -7.616  20.941  18.326  1.00 33.27           C
ATOM   1475  CE2  PHE B2075      -8.047  21.987  16.187  1.00 33.20           C
ATOM   1476  CZ   PHE B2075      -7.163  21.360  17.071  1.00 33.45           C
ATOM   1477  C    PHE B2075     -12.597  22.877  20.163  1.00 31.04           C
ATOM   1478  O    PHE B2075     -12.340  24.072  20.277  1.00 30.78           O
ATOM   1479  N    GLN B2076     -13.787  22.357  20.462  1.00 29.52           N
ATOM   1480  CA   GLN B2076     -14.897  23.185  20.929  1.00 28.06           C
ATOM   1481  CB   GLN B2076     -16.226  22.493  20.630  1.00 27.83           C
ATOM   1482  CG   GLN B2076     -16.489  22.365  19.144  1.00 27.93           C
ATOM   1483  CD   GLN B2076     -16.666  23.716  18.479  1.00 28.25           C
ATOM   1484  OE1  GLN B2076     -16.170  23.950  17.376  1.00 28.52           O
ATOM   1485  NE2  GLN B2076     -17.387  24.613  19.145  1.00 27.92           N
ATOM   1486  C    GLN B2076     -14.765  23.476  22.423  1.00 27.11           C
ATOM   1487  O    GLN B2076     -15.536  24.241  23.000  1.00 26.54           O
ATOM   1488  N    ASP B2077     -13.768  22.860  23.037  1.00 26.23           N
ATOM   1489  CA   ASP B2077     -13.505  23.059  24.447  1.00 26.09           C
ATOM   1490  CB   ASP B2077     -13.173  21.721  25.108  1.00 27.19           C
ATOM   1491  CG   ASP B2077     -14.401  20.856  25.292  1.00 28.36           C
ATOM   1492  OD1  ASP B2077     -15.304  21.276  26.043  1.00 29.34           O
ATOM   1493  OD2  ASP B2077     -14.469  19.767  24.686  1.00 29.83           O
ATOM   1494  C    ASP B2077     -12.354  24.041  24.614  1.00 24.96           C
ATOM   1495  O    ASP B2077     -11.917  24.328  25.730  1.00 24.58           O
ATOM   1496  N    LEU B2078     -11.870  24.553  23.490  1.00 23.44           N
ATOM   1497  CA   LEU B2078     -10.783  25.507  23.502  1.00 22.63           C
ATOM   1498  CB   LEU B2078      -9.534  24.900  22.868  1.00 22.62           C
ATOM   1499  CG   LEU B2078      -8.989  23.599  23.468  1.00 22.75           C
ATOM   1500  CD1  LEU B2078      -7.933  23.010  22.543  1.00 22.77           C
ATOM   1501  CD2  LEU B2078      -8.401  23.870  24.841  1.00 22.96           C
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ATOM   1502  C   LEU B2078     -11.200  26.741  22.726  1.00 22.37          C
ATOM   1503  O   LEU B2078     -11.709  26.642  21.611  1.00 21.73          O
ATOM   1504  N   GLU B2079     -11.001  27.908  23.324  1.00 21.99          N
ATOM   1505  CA  GLU B2079     -11.342  29.145  22.648  1.00 21.60          C
ATOM   1506  CB  GLU B2079     -12.624  29.740  23.214  1.00 21.69          C
ATOM   1507  CG  GLU B2079     -13.132  30.922  22.421  1.00 22.30          C
ATOM   1508  CD  GLU B2079     -14.459  31.412  22.937  1.00 23.08          C
ATOM   1509  OE1 GLU B2079     -14.499  31.893  24.089  1.00 24.19          O
ATOM   1510  OE2 GLU B2079     -15.462  31.311  22.201  1.00 22.86          O
ATOM   1511  C   GLU B2079     -10.216  30.144  22.792  1.00 21.14          C
ATOM   1512  O   GLU B2079      -9.606  30.265  23.862  1.00 21.43          O
ATOM   1513  N   VAL B2080      -9.940  30.852  21.705  1.00 20.42          N
ATOM   1514  CA  VAL B2080      -8.892  31.850  21.691  1.00 20.15          C
ATOM   1515  CB  VAL B2080      -7.728  31.418  20.780  1.00 19.96          C
ATOM   1516  CG1 VAL B2080      -6.662  32.517  20.735  1.00 19.66          C
ATOM   1517  CG2 VAL B2080      -7.127  30.123  21.297  1.00 19.86          C
ATOM   1518  C   VAL B2080      -9.436  33.187  21.211  1.00 20.63          C
ATOM   1519  O   VAL B2080      -9.899  33.320  20.075  1.00 20.55          O
ATOM   1520  N   LEU B2081      -9.379  34.178  22.089  1.00 20.91          N
ATOM   1521  CA  LEU B2081      -9.852  35.515  21.767  1.00 21.71          C
ATOM   1522  CB  LEU B2081     -10.913  35.953  22.779  1.00 21.41          C
ATOM   1523  CG  LEU B2081     -12.150  35.049  22.846  1.00 21.70          C
ATOM   1524  CD1 LEU B2081     -13.145  35.618  23.864  1.00 20.86          C
ATOM   1525  CD2 LEU B2081     -12.788  34.947  21.451  1.00 20.91          C
ATOM   1526  C   LEU B2081      -8.690  36.488  21.802  1.00 21.95          C
ATOM   1527  O   LEU B2081      -7.592  36.135  22.255  1.00 22.11          O
ATOM   1528  N   ASN B2082      -8.927  37.700  21.302  1.00 22.09          N
ATOM   1529  CA  ASN B2082      -7.912  38.754  21.334  1.00 22.53          C
ATOM   1530  CB  ASN B2082      -7.809  39.483  19.992  1.00 23.53          C
ATOM   1531  CG  ASN B2082      -7.347  38.588  18.882  1.00 24.84          C
ATOM   1532  OD1 ASN B2082      -6.350  37.880  19.016  1.00 25.89          O
ATOM   1533  ND2 ASN B2082      -8.066  38.613  17.766  1.00 26.27          N
ATOM   1534  C   ASN B2082      -8.345  39.754  22.402  1.00 22.18          C
ATOM   1535  O   ASN B2082      -9.528  40.069  22.514  1.00 21.35          O
ATOM   1536  N   ASN B2083      -7.391  40.244  23.186  1.00 22.35          N
ATOM   1537  CA  ASN B2083      -7.699  41.215  24.227  1.00 22.53          C
ATOM   1538  CB  ASN B2083      -6.711  41.092  25.391  1.00 21.65          C
ATOM   1539  CG  ASN B2083      -5.267  41.394  24.995  1.00 21.91          C
ATOM   1540  OD1 ASN B2083      -4.338  41.115  25.762  1.00 22.04          O
ATOM   1541  ND2 ASN B2083      -5.068  41.963  23.808  1.00 20.96          N
ATOM   1542  C   ASN B2083      -7.679  42.632  23.663  1.00 23.31          C
ATOM   1543  O   ASN B2083      -7.344  42.834  22.493  1.00 23.42          O
ATOM   1544  N   GLU B2084      -8.037  43.605  24.498  1.00 23.94          N
ATOM   1545  CA  GLU B2084      -8.062  45.012  24.098  1.00 24.84          C
ATOM   1546  CB  GLU B2084      -8.089  45.924  25.336  1.00 26.09          C
ATOM   1547  CG  GLU B2084      -9.171  45.622  26.355  1.00 28.21          C
ATOM   1548  CD  GLU B2084      -8.992  44.259  27.014  1.00 30.57          C
ATOM   1549  OE1 GLU B2084      -7.892  44.001  27.565  1.00 31.38          O
ATOM   1550  OE2 GLU B2084      -9.952  43.448  26.984  1.00 31.36          O
ATOM   1551  C   GLU B2084      -6.871  45.421  23.223  1.00 24.40          C
ATOM   1552  O   GLU B2084      -7.033  46.197  22.292  1.00 24.89          O
ATOM   1553  N   ARG B2085      -5.683  44.905  23.530  1.00 24.24          N
ATOM   1554  CA  ARG B2085      -4.464  45.245  22.782  1.00 24.07          C
ATOM   1555  CB  ARG B2085      -3.237  45.139  23.688  1.00 24.81          C
ATOM   1556  CG  ARG B2085      -3.375  45.824  25.022  1.00 26.63          C
ATOM   1557  CD  ARG B2085      -2.090  45.727  25.844  1.00 27.63          C
ATOM   1558  NE  ARG B2085      -2.124  46.668  26.962  1.00 28.81          N
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ATOM    1559  CZ  ARG B2085      -2.915  46.532  28.016  1.00 29.08          C
ATOM    1560  NH1 ARG B2085      -3.725  45.489  28.090  1.00 30.38          N
ATOM    1561  NH2 ARG B2085      -2.915  47.441  28.984  1.00 29.49          N
ATOM    1562  C   ARG B2085      -4.201  44.386  21.548  1.00 23.45          C
ATOM    1563  O   ARG B2085      -3.231  44.616  20.839  1.00 23.48          O
ATOM    1564  N   GLY B2086      -5.043  43.388  21.304  1.00 22.86          N
ATOM    1565  CA  GLY B2086      -4.845  42.531  20.148  1.00 22.18          C
ATOM    1566  C   GLY B2086      -4.106  41.231  20.442  1.00 22.02          C
ATOM    1567  O   GLY B2086      -3.935  40.391  19.557  1.00 22.97          O
ATOM    1568  N   ALA B2087      -3.658  41.053  21.677  1.00 20.91          N
ATOM    1569  CA  ALA B2087      -2.948  39.836  22.038  1.00 19.91          C
ATOM    1570  CB  ALA B2087      -2.196  40.028  23.362  1.00 19.31          C
ATOM    1571  C   ALA B2087      -3.940  38.675  22.161  1.00 19.35          C
ATOM    1572  O   ALA B2087      -5.013  38.816  22.757  1.00 18.31          O
ATOM    1573  N   PRO B2088      -3.598  37.520  21.566  1.00 19.16          N
ATOM    1574  CD  PRO B2088      -2.449  37.311  20.656  1.00 19.16          C
ATOM    1575  CA  PRO B2088      -4.450  36.331  21.611  1.00 18.85          C
ATOM    1576  CB  PRO B2088      -3.968  35.529  20.408  1.00 19.28          C
ATOM    1577  CG  PRO B2088      -2.478  35.817  20.403  1.00 18.72          C
ATOM    1578  C   PRO B2088      -4.229  35.597  22.934  1.00 18.76          C
ATOM    1579  O   PRO B2088      -3.098  35.484  23.404  1.00 18.99          O
ATOM    1580  N   TYR B2089      -5.310  35.108  23.533  1.00 18.27          N
ATOM    1581  CA  TYR B2089      -5.230  34.394  24.804  1.00 17.56          C
ATOM    1582  CB  TYR B2089      -5.394  35.379  25.960  1.00 15.80          C
ATOM    1583  CG  TYR B2089      -6.792  35.933  26.103  1.00 14.62          C
ATOM    1584  CD1 TYR B2089      -7.684  35.402  27.036  1.00 14.04          C
ATOM    1585  CE1 TYR B2089      -8.983  35.916  27.160  1.00 13.45          C
ATOM    1586  CD2 TYR B2089      -7.231  36.991  25.294  1.00 13.76          C
ATOM    1587  CE2 TYR B2089      -8.507  37.499  25.405  1.00 12.48          C
ATOM    1588  CZ  TYR B2089      -9.381  36.964  26.336  1.00 13.07          C
ATOM    1589  OH  TYR B2089     -10.649  37.475  26.433  1.00 12.87          O
ATOM    1590  C   TYR B2089      -6.333  33.349  24.865  1.00 18.14          C
ATOM    1591  O   TYR B2089      -7.302  33.433  24.118  1.00 18.32          O
ATOM    1592  N   PHE B2090      -6.196  32.360  25.741  1.00 18.75          N
ATOM    1593  CA  PHE B2090      -7.242  31.350  25.853  1.00 19.41          C
ATOM    1594  CB  PHE B2090      -6.686  30.012  26.353  1.00 18.52          C
ATOM    1595  CG  PHE B2090      -6.044  29.187  25.282  1.00 18.19          C
ATOM    1596  CD1 PHE B2090      -4.716  29.402  24.912  1.00 17.08          C
ATOM    1597  CD2 PHE B2090      -6.769  28.182  24.638  1.00 17.63          C
ATOM    1598  CE1 PHE B2090      -4.119  28.626  23.920  1.00 16.47          C
ATOM    1599  CE2 PHE B2090      -6.177  27.400  23.640  1.00 16.79          C
ATOM    1600  CZ  PHE B2090      -4.847  27.625  23.284  1.00 16.73          C
ATOM    1601  C   PHE B2090      -8.334  31.806  26.802  1.00 20.35          C
ATOM    1602  O   PHE B2090      -8.092  31.963  27.997  1.00 20.62          O
ATOM    1603  N   SER B2091      -9.535  32.010  26.271  1.00 21.43          N
ATOM    1604  CA  SER B2091     -10.664  32.430  27.096  1.00 22.72          C
ATOM    1605  CB  SER B2091     -11.635  33.293  26.278  1.00 22.59          C
ATOM    1606  OG  SER B2091     -12.173  32.566  25.187  1.00 24.06          O
ATOM    1607  C   SER B2091     -11.385  31.194  27.651  1.00 23.50          C
ATOM    1608  O   SER B2091     -12.133  31.289  28.623  1.00 23.39          O
ATOM    1609  N   GLN B2092     -11.154  30.041  27.024  1.00 24.05          N
ATOM    1610  CA  GLN B2092     -11.757  28.784  27.458  1.00 25.18          C
ATOM    1611  CB  GLN B2092     -12.970  28.420  26.591  1.00 26.15          C
ATOM    1612  CG  GLN B2092     -14.194  29.321  26.733  1.00 28.02          C
ATOM    1613  CD  GLN B2092     -14.848  29.241  28.105  1.00 29.69          C
ATOM    1614  OE1 GLN B2092     -14.974  28.159  28.687  1.00 30.83          O
ATOM    1615  NE2 GLN B2092     -15.283  30.389  28.622  1.00 30.35          N
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ATOM   1616  C   GLN B2092     -10.725  27.661  27.354  1.00 25.31           C
ATOM   1617  O   GLN B2092     -10.029  27.541  26.343  1.00 25.18           O
ATOM   1618  N   ALA B2093     -10.631  26.838  28.395  1.00 25.61           N
ATOM   1619  CA  ALA B2093      -9.680  25.733  28.394  1.00 26.50           C
ATOM   1620  CB  ALA B2093      -8.243  26.278  28.384  1.00 25.87           C
ATOM   1621  C   ALA B2093      -9.876  24.805  29.587  1.00 27.03           C
ATOM   1622  O   ALA B2093     -10.200  25.252  30.687  1.00 27.16           O
ATOM   1623  N   PRO B2094      -9.671  23.492  29.382  1.00 27.79           N
ATOM   1624  CD  PRO B2094      -9.377  22.840  28.090  1.00 27.87           C
ATOM   1625  CA  PRO B2094      -9.824  22.497  30.452  1.00 28.17           C
ATOM   1626  CB  PRO B2094      -9.970  21.191  29.681  1.00 27.97           C
ATOM   1627  CG  PRO B2094      -9.068  21.408  28.501  1.00 27.75           C
ATOM   1628  C   PRO B2094      -8.611  22.489  31.384  1.00 28.93           C
ATOM   1629  O   PRO B2094      -8.149  21.429  31.819  1.00 29.42           O
ATOM   1630  N   PHE B2095      -8.099  23.676  31.690  1.00 29.04           N
ATOM   1631  CA  PHE B2095      -6.929  23.812  32.551  1.00 28.93           C
ATOM   1632  CB  PHE B2095      -5.704  24.150  31.689  1.00 28.61           C
ATOM   1633  CG  PHE B2095      -4.416  24.266  32.460  1.00 28.08           C
ATOM   1634  CD1 PHE B2095      -3.697  25.457  32.454  1.00 27.74           C
ATOM   1635  CD2 PHE B2095      -3.918  23.185  33.187  1.00 27.48           C
ATOM   1636  CE1 PHE B2095      -2.503  25.574  33.158  1.00 27.44           C
ATOM   1637  CE2 PHE B2095      -2.730  23.292  33.893  1.00 27.21           C
ATOM   1638  CZ  PHE B2095      -2.018  24.492  33.880  1.00 27.64           C
ATOM   1639  C   PHE B2095      -7.220  24.934  33.544  1.00 29.17           C
ATOM   1640  O   PHE B2095      -7.922  25.893  33.211  1.00 29.61           O
ATOM   1641  N   SER B2096      -6.690  24.821  34.758  1.00 28.80           N
ATOM   1642  CA  SER B2096      -6.931  25.837  35.771  1.00 28.67           C
ATOM   1643  CB  SER B2096      -7.374  25.177  37.078  1.00 29.60           C
ATOM   1644  OG  SER B2096      -8.489  24.328  36.859  1.00 31.74           O
ATOM   1645  C   SER B2096      -5.719  26.716  36.038  1.00 27.69           C
ATOM   1646  O   SER B2096      -5.828  27.746  36.700  1.00 27.77           O
ATOM   1647  N   GLY B2097      -4.563  26.318  35.526  1.00 26.80           N
ATOM   1648  CA  GLY B2097      -3.370  27.115  35.752  1.00 25.56           C
ATOM   1649  C   GLY B2097      -3.246  28.268  34.771  1.00 24.43           C
ATOM   1650  O   GLY B2097      -4.224  28.686  34.155  1.00 23.36           O
ATOM   1651  N   LYS B2098      -2.032  28.786  34.629  1.00 23.85           N
ATOM   1652  CA  LYS B2098      -1.786  29.886  33.707  1.00 23.16           C
ATOM   1653  CB  LYS B2098      -0.656  30.789  34.212  1.00 24.15           C
ATOM   1654  CG  LYS B2098      -1.025  31.639  35.408  1.00 25.14           C
ATOM   1655  CD  LYS B2098       0.036  32.693  35.659  1.00 26.88           C
ATOM   1656  CE  LYS B2098      -0.288  33.524  36.895  1.00 27.83           C
ATOM   1657  NZ  LYS B2098      -0.224  32.680  38.126  1.00 28.96           N
ATOM   1658  C   LYS B2098      -1.406  29.332  32.353  1.00 21.88           C
ATOM   1659  O   LYS B2098      -0.604  28.402  32.261  1.00 21.71           O
ATOM   1660  N   ILE B2099      -1.997  29.905  31.310  1.00 20.39           N
ATOM   1661  CA  ILE B2099      -1.723  29.494  29.941  1.00 19.37           C
ATOM   1662  CB  ILE B2099      -3.027  29.186  29.165  1.00 19.23           C
ATOM   1663  CG2 ILE B2099      -2.695  28.629  27.779  1.00 18.49           C
ATOM   1664  CG1 ILE B2099      -3.878  28.182  29.950  1.00 18.74           C
ATOM   1665  CD1 ILE B2099      -5.199  27.892  29.299  1.00 18.23           C
ATOM   1666  C   ILE B2099      -0.997  30.621  29.221  1.00 18.65           C
ATOM   1667  O   ILE B2099      -1.570  31.683  28.973  1.00 18.86           O
ATOM   1668  N   TRP B2100       0.273  30.401  28.907  1.00 17.78           N
ATOM   1669  CA  TRP B2100       1.043  31.407  28.195  1.00 17.08           C
ATOM   1670  CB  TRP B2100       2.477  31.487  28.735  1.00 15.80           C
ATOM   1671  CG  TRP B2100       2.533  31.922  30.180  1.00 15.68           C
ATOM   1672  CD2 TRP B2100       2.423  33.264  30.679  1.00 15.05           C
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ATOM   1673  CE2 TRP B2100       2.466  33.189  32.093  1.00 15.31           C
ATOM   1674  CE3 TRP B2100       2.289  34.522  30.070  1.00 15.15           C
ATOM   1675  CD1 TRP B2100       2.636  31.111  31.284  1.00 15.45           C
ATOM   1676  NE1 TRP B2100       2.595  31.868  32.432  1.00 15.26           N
ATOM   1677  CZ2 TRP B2100       2.384  34.328  32.912  1.00 15.02           C
ATOM   1678  CZ3 TRP B2100       2.204  35.658  30.883  1.00 15.47           C
ATOM   1679  CH2 TRP B2100       2.253  35.548  32.291  1.00 15.54           C
ATOM   1680  C   TRP B2100       1.027  31.028  26.723  1.00 17.16           C
ATOM   1681  O   TRP B2100       1.627  30.041  26.311  1.00 17.52           O
ATOM   1682  N   LEU B2101       0.314  31.821  25.937  1.00 17.56           N
ATOM   1683  CA  LEU B2101       0.180  31.575  24.508  1.00 17.56           C
ATOM   1684  CB  LEU B2101      -1.304  31.454  24.137  1.00 17.63           C
ATOM   1685  CG  LEU B2101      -1.641  31.497  22.635  1.00 18.34           C
ATOM   1686  CD1 LEU B2101      -1.241  30.157  21.964  1.00 17.98           C
ATOM   1687  CD2 LEU B2101      -3.132  31.768  22.444  1.00 17.63           C
ATOM   1688  C   LEU B2101       0.789  32.685  23.681  1.00 17.40           C
ATOM   1689  O   LEU B2101       0.770  33.849  24.075  1.00 17.23           O
ATOM   1690  N   SER B2102       1.332  32.312  22.529  1.00 17.67           N
ATOM   1691  CA  SER B2102       1.892  33.274  21.602  1.00 17.46           C
ATOM   1692  CB  SER B2102       3.366  33.551  21.892  1.00 17.36           C
ATOM   1693  OG  SER B2102       3.797  34.687  21.150  1.00 17.27           O
ATOM   1694  C   SER B2102       1.731  32.739  20.185  1.00 17.83           C
ATOM   1695  O   SER B2102       1.984  31.563  19.919  1.00 17.13           O
ATOM   1696  N   ILE B2103       1.286  33.616  19.288  1.00 18.64           N
ATOM   1697  CA  ILE B2103       1.084  33.270  17.888  1.00 19.37           C
ATOM   1698  CB  ILE B2103      -0.429  33.275  17.515  1.00 19.72           C
ATOM   1699  CG2 ILE B2103      -0.625  32.778  16.079  1.00 19.83           C
ATOM   1700  CG1 ILE B2103      -1.213  32.382  18.480  1.00 20.18           C
ATOM   1701  CD1 ILE B2103      -2.722  32.470  18.314  1.00 20.28           C
ATOM   1702  C   ILE B2103       1.813  34.299  17.014  1.00 19.77           C
ATOM   1703  O   ILE B2103       1.857  35.489  17.330  1.00 18.81           O
ATOM   1704  N   SER B2104       2.396  33.818  15.925  1.00 20.35           N
ATOM   1705  CA  SER B2104       3.096  34.673  14.974  1.00 21.48           C
ATOM   1706  CB  SER B2104       4.603  34.675  15.268  1.00 21.45           C
ATOM   1707  OG  SER B2104       5.328  35.484  14.351  1.00 21.11           O
ATOM   1708  C   SER B2104       2.826  34.069  13.598  1.00 22.45           C
ATOM   1709  O   SER B2104       2.492  32.884  13.488  1.00 22.26           O
ATOM   1710  N   HIS B2105       2.949  34.872  12.549  1.00 23.91           N
ATOM   1711  CA  HIS B2105       2.725  34.348  11.207  1.00 25.44           C
ATOM   1712  CB  HIS B2105       1.235  34.372  10.867  1.00 26.52           C
ATOM   1713  CG  HIS B2105       0.682  35.754  10.693  1.00 27.10           C
ATOM   1714  CD2 HIS B2105       0.353  36.451   9.577  1.00 27.93           C
ATOM   1715  ND1 HIS B2105       0.427  36.594  11.755  1.00 27.73           N
ATOM   1716  CE1 HIS B2105      -0.036  37.747  11.302  1.00 27.61           C
ATOM   1717  NE2 HIS B2105      -0.091  37.686   9.984  1.00 27.60           N
ATOM   1718  C   HIS B2105       3.467  35.117  10.123  1.00 25.84           C
ATOM   1719  O   HIS B2105       3.836  36.274  10.303  1.00 25.76           O
ATOM   1720  N   THR B2106       3.688  34.444   9.001  1.00 26.43           N
ATOM   1721  CA  THR B2106       4.314  35.051   7.834  1.00 27.12           C
ATOM   1722  CB  THR B2106       5.546  34.261   7.341  1.00 27.09           C
ATOM   1723  OG1 THR B2106       5.137  32.968   6.888  1.00 26.88           O
ATOM   1724  CG2 THR B2106       6.576  34.120   8.452  1.00 27.18           C
ATOM   1725  C   THR B2106       3.213  34.953   6.777  1.00 27.59           C
ATOM   1726  O   THR B2106       2.059  34.688   7.116  1.00 28.11           O
ATOM   1727  N   ASP B2107       3.553  35.148   5.508  1.00 27.85           N
ATOM   1728  CA  ASP B2107       2.554  35.068   4.449  1.00 28.22           C
ATOM   1729  CB  ASP B2107       3.085  35.722   3.170  0.05 28.14           C
ATOM   1730  CG  ASP B2107       3.275  37.220   3.316  0.05 28.09           C
ATOM   1731  OD1 ASP B2107       2.276  37.926   3.569  0.05 28.04           O
ATOM   1732  OD2 ASP B2107       4.422  37.693   3.177  0.05 28.08           O
ATOM   1733  C   ASP B2107       2.116  33.632   4.138  1.00 28.63           C
ATOM   1734  O   ASP B2107       0.995  33.408   3.684  1.00 28.77           O
ATOM   1735  N   GLN B2108       2.988  32.662   4.392  1.00 28.69           N
ATOM   1736  CA  GLN B2108       2.663  31.272   4.093  1.00 29.21           C
ATOM   1737  CB  GLN B2108       3.753  30.666   3.201  1.00 30.96           C
ATOM   1738  CG  GLN B2108       4.217  31.565   2.059  1.00 32.72           C
ATOM   1739  CD  GLN B2108       5.386  30.967   1.282  1.00 34.31           C
ATOM   1740  OE1 GLN B2108       5.195  30.201   0.328  1.00 34.84           O
ATOM   1741  NE2 GLN B2108       6.605  31.306   1.699  1.00 34.53           N
ATOM   1742  C   GLN B2108       2.482  30.366   5.308  1.00 28.68           C
ATOM   1743  O   GLN B2108       1.819  29.337   5.215  1.00 28.89           O
ATOM   1744  N   PHE B2109       3.068  30.741   6.441  1.00 27.66           N
ATOM   1745  CA  PHE B2109       2.985  29.916   7.641  1.00 26.50           C
ATOM   1746  CB  PHE B2109       4.347  29.287   7.953  1.00 26.61           C
ATOM   1747  CG  PHE B2109       4.860  28.387   6.875  1.00 27.11           C
ATOM   1748  CD1 PHE B2109       5.577  28.907   5.799  1.00 27.30           C
ATOM   1749  CD2 PHE B2109       4.599  27.020   6.913  1.00 26.71           C
ATOM   1750  CE1 PHE B2109       6.026  28.073   4.773  1.00 27.50           C
ATOM   1751  CE2 PHE B2109       5.045  26.180   5.893  1.00 27.16           C
ATOM   1752  CZ  PHE B2109       5.757  26.706   4.823  1.00 27.50           C
ATOM   1753  C   PHE B2109       2.524  30.648   8.883  1.00 25.59           C
ATOM   1754  O   PHE B2109       2.625  31.872   8.967  1.00 25.67           O
ATOM   1755  N   VAL B2110       2.016  29.881   9.843  1.00 24.04           N
ATOM   1756  CA  VAL B2110       1.580  30.435  11.114  1.00 23.42           C
ATOM   1757  CB  VAL B2110       0.045  30.435  11.267  1.00 23.14           C
ATOM   1758  CG1 VAL B2110      -0.498  29.016  11.276  1.00 23.49           C
ATOM   1759  CG2 VAL B2110      -0.327  31.151  12.535  1.00 23.40           C
ATOM   1760  C   VAL B2110       2.201  29.562  12.188  1.00 22.98           C
ATOM   1761  O   VAL B2110       2.371  28.364  11.996  1.00 23.38           O
ATOM   1762  N   THR B2111       2.555  30.161  13.314  1.00 22.66           N
ATOM   1763  CA  THR B2111       3.175  29.402  14.390  1.00 22.51           C
ATOM   1764  CB  THR B2111       4.674  29.721  14.459  1.00 23.02           C
ATOM   1765  OG1 THR B2111       5.310  28.830  15.373  1.00 25.57           O
ATOM   1766  CG2 THR B2111       4.891  31.148  14.928  1.00 23.27           C
ATOM   1767  C   THR B2111       2.531  29.714  15.735  1.00 21.17           C
ATOM   1768  O   THR B2111       2.013  30.807  15.939  1.00 21.65           O
ATOM   1769  N   ALA B2112       2.565  28.748  16.649  1.00 19.97           N
ATOM   1770  CA  ALA B2112       1.986  28.928  17.985  1.00 18.49           C
ATOM   1771  CB  ALA B2112       0.549  28.422  18.009  1.00 16.81           C
ATOM   1772  C   ALA B2112       2.805  28.227  19.073  1.00 17.74           C
ATOM   1773  O   ALA B2112       3.375  27.168  18.857  1.00 16.72           O
ATOM   1774  N   SER B2113       2.860  28.834  20.251  1.00 17.84           N
ATOM   1775  CA  SER B2113       3.597  28.250  21.365  1.00 17.93           C
ATOM   1776  CB  SER B2113       4.985  28.893  21.495  1.00 17.90           C
ATOM   1777  OG  SER B2113       5.742  28.263  22.512  1.00 17.60           O
ATOM   1778  C   SER B2113       2.805  28.439  22.653  1.00 17.35           C
ATOM   1779  O   SER B2113       2.262  29.510  22.905  1.00 17.22           O
ATOM   1780  N   VAL B2114       2.749  27.382  23.452  1.00 16.89           N
ATOM   1781  CA  VAL B2114       2.020  27.383  24.708  1.00 16.75           C
ATOM   1782  CB  VAL B2114       0.718  26.533  24.612  1.00 16.63           C
ATOM   1783  CG1 VAL B2114       0.112  26.347  25.999  1.00 16.16           C
ATOM   1784  CG2 VAL B2114      -0.298  27.205  23.675  1.00 16.25           C
ATOM   1785  C   VAL B2114       2.862  26.799  25.835  1.00 17.45           C
ATOM   1786  O   VAL B2114       3.503  25.750  25.680  1.00 16.99           O
ATOM    1787  N   ILE B2115      2.863  27.497  26.966  1.00 17.80           N
ATOM    1788  CA  ILE B2115      3.566  27.037  28.156  1.00 18.72           C
ATOM    1789  CB  ILE B2115      4.689  28.008  28.602  1.00 18.37           C
ATOM    1790  CG2 ILE B2115      5.385  27.452  29.846  1.00 18.27           C
ATOM    1791  CG1 ILE B2115      5.708  28.205  27.480  1.00 18.40           C
ATOM    1792  CD1 ILE B2115      6.745  29.289  27.786  1.00 17.55           C
ATOM    1793  C   ILE B2115      2.515  27.000  29.260  1.00 19.25           C
ATOM    1794  O   ILE B2115      1.858  28.004  29.524  1.00 19.38           O
ATOM    1795  N   LEU B2116      2.336  25.846  29.884  1.00 20.55           N
ATOM    1796  CA  LEU B2116      1.374  25.735  30.968  1.00 22.30           C
ATOM    1797  CB  LEU B2116      0.628  24.404  30.902  1.00 21.86           C
ATOM    1798  CG  LEU B2116     -0.147  24.159  29.603  1.00 22.00           C
ATOM    1799  CD1 LEU B2116     -0.976  22.893  29.732  1.00 21.49           C
ATOM    1800  CD2 LEU B2116     -1.050  25.359  29.303  1.00 21.93           C
ATOM    1801  C   LEU B2116      2.123  25.864  32.290  1.00 24.11           C
ATOM    1802  O   LEU B2116      3.209  25.299  32.472  1.00 23.89           O
ATOM    1803  N   GLU B2117      1.544  26.621  33.210  1.00 26.00           N
ATOM    1804  CA  GLU B2117      2.177  26.840  34.493  1.00 28.60           C
ATOM    1805  CB  GLU B2117      2.746  28.258  34.531  1.00 28.59           C
ATOM    1806  CG  GLU B2117      3.418  28.627  35.829  1.00 30.48           C
ATOM    1807  CD  GLU B2117      4.079  29.997  35.771  1.00 31.11           C
ATOM    1808  OE1 GLU B2117      3.395  30.972  35.385  1.00 31.07           O
ATOM    1809  OE2 GLU B2117      5.281  30.092  36.115  1.00 31.14           O
ATOM    1810  C   GLU B2117      1.217  26.601  35.659  1.00 30.07           C
ATOM    1811  O   GLU B2117      0.029  26.938  35.595  1.00 29.34           O
ATOM    1812  N   GLU B2118      1.742  26.006  36.726  1.00 32.11           N
ATOM    1813  CA  GLU B2118      0.926  25.712  37.889  1.00 34.40           C
ATOM    1814  CB  GLU B2118      0.997  24.223  38.212  1.00 35.62           C
ATOM    1815  CG  GLU B2118     -0.294  23.679  38.772  1.00 37.98           C
ATOM    1816  CD  GLU B2118     -1.458  23.905  37.825  1.00 39.13           C
ATOM    1817  OE1 GLU B2118     -1.403  23.398  36.682  1.00 39.94           O
ATOM    1818  OE2 GLU B2118     -2.422  24.596  38.222  1.00 40.32           O
ATOM    1819  C   GLU B2118      1.387  26.515  39.090  1.00 35.21           C
ATOM    1820  O   GLU B2118      2.611  26.552  39.343  1.00 35.67           O
ATOM    1821  OXT GLU B2118      0.507  27.088  39.767  1.00 36.45           O
TER     1822      GLU B2118
ATOM    1823  CB  MET C3003     14.254  28.191  38.580  1.00 31.28           C
ATOM    1824  CG  MET C3003     15.448  27.262  38.618  1.00 32.93           C
ATOM    1825  SD  MET C3003     16.870  27.987  39.434  1.00 35.68           S
ATOM    1826  CE  MET C3003     16.438  27.672  41.140  1.00 34.95           C
ATOM    1827  C   MET C3003     13.519  27.087  36.482  1.00 29.25           C
ATOM    1828  O   MET C3003     13.901  25.920  36.332  1.00 28.76           O
ATOM    1829  N   MET C3003     12.435  26.519  38.666  1.00 30.53           N
ATOM    1830  CA  MET C3003     13.052  27.596  37.845  1.00 30.20           C
ATOM    1831  N   ILE C3004     13.491  27.976  35.493  1.00 28.16           N
ATOM    1832  CA  ILE C3004     13.945  27.636  34.149  1.00 27.31           C
ATOM    1833  CB  ILE C3004     13.377  28.604  33.084  1.00 27.05           C
ATOM    1834  CG2 ILE C3004     14.103  28.413  31.761  1.00 26.26           C
ATOM    1835  CG1 ILE C3004     11.876  28.372  32.919  1.00 26.90           C
ATOM    1836  CD1 ILE C3004     11.203  29.374  31.996  1.00 27.09           C
ATOM    1837  C   ILE C3004     15.452  27.775  34.170  1.00 26.61           C
ATOM    1838  O   ILE C3004     15.970  28.755  34.685  1.00 26.80           O
ATOM    1839  N   VAL C3005     16.153  26.794  33.617  1.00 26.02           N
ATOM    1840  CA  VAL C3005     17.611  26.822  33.581  1.00 25.10           C
ATOM    1841  CB  VAL C3005     18.221  25.644  34.396  1.00 25.36           C
ATOM    1842  CG1 VAL C3005     17.820  25.766  35.869  1.00 25.11           C
ATOM    1843  CG2 VAL C3005     17.755  24.306  33.833  1.00 24.57           C
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ATOM   1844  C    VAL C3005       18.124  26.747  32.152  1.00 24.50           C
ATOM   1845  O    VAL C3005       19.327  26.640  31.928  1.00 25.44           O
ATOM   1846  N    GLY C3006       17.212  26.805  31.186  1.00 23.63           N
ATOM   1847  CA   GLY C3006       17.612  26.736  29.791  1.00 22.31           C
ATOM   1848  C    GLY C3006       16.446  26.762  28.820  1.00 21.49           C
ATOM   1849  O    GLY C3006       15.332  26.348  29.156  1.00 21.47           O
ATOM   1850  N    HIS C3007       16.700  27.254  27.609  1.00 20.33           N
ATOM   1851  CA   HIS C3007       15.664  27.336  26.582  1.00 19.44           C
ATOM   1852  CB   HIS C3007       14.806  28.591  26.785  1.00 18.31           C
ATOM   1853  CG   HIS C3007       13.749  28.777  25.741  1.00 18.22           C
ATOM   1854  CD2  HIS C3007       13.411  29.857  24.997  1.00 18.17           C
ATOM   1855  ND1  HIS C3007       12.871  27.778  25.384  1.00 18.32           N
ATOM   1856  CE1  HIS C3007       12.036  28.233  24.467  1.00 18.15           C
ATOM   1857  NE2  HIS C3007       12.342  29.492  24.215  1.00 18.03           N
ATOM   1858  C    HIS C3007       16.288  27.357  25.196  1.00 18.96           C
ATOM   1859  O    HIS C3007       17.200  28.125  24.940  1.00 19.65           O
ATOM   1860  N    GLY C3008       15.795  26.504  24.307  1.00 18.27           N
ATOM   1861  CA   GLY C3008       16.340  26.468  22.965  1.00 17.73           C
ATOM   1862  C    GLY C3008       15.307  26.061  21.932  1.00 17.73           C
ATOM   1863  O    GLY C3008       14.398  25.274  22.215  1.00 16.98           O
ATOM   1864  N    ILE C3009       15.426  26.620  20.735  1.00 17.47           N
ATOM   1865  CA   ILE C3009       14.512  26.281  19.658  1.00 18.23           C
ATOM   1866  CB   ILE C3009       13.483  27.414  19.340  1.00 17.95           C
ATOM   1867  CG2  ILE C3009       12.743  27.836  20.604  1.00 17.06           C
ATOM   1868  CG1  ILE C3009       14.192  28.608  18.683  1.00 17.87           C
ATOM   1869  CD1  ILE C3009       13.233  29.653  18.104  1.00 18.30           C
ATOM   1870  C    ILE C3009       15.327  26.029  18.406  1.00 19.18           C
ATOM   1871  O    ILE C3009       16.516  26.345  18.345  1.00 18.80           O
ATOM   1872  N    ASP C3010       14.682  25.439  17.413  1.00 20.69           N
ATOM   1873  CA   ASP C3010       15.330  25.188  16.144  1.00 22.71           C
ATOM   1874  CB   ASP C3010       16.251  23.974  16.216  1.00 23.72           C
ATOM   1875  CG   ASP C3010       16.949  23.710  14.899  1.00 24.96           C
ATOM   1876  OD1  ASP C3010       17.840  24.501  14.528  1.00 26.04           O
ATOM   1877  OD2  ASP C3010       16.598  22.724  14.219  1.00 26.67           O
ATOM   1878  C    ASP C3010       14.307  24.963  15.045  1.00 23.50           C
ATOM   1879  O    ASP C3010       13.239  24.407  15.278  1.00 23.37           O
ATOM   1880  N    ILE C3011       14.645  25.428  13.851  1.00 24.39           N
ATOM   1881  CA   ILE C3011       13.796  25.259  12.695  1.00 25.77           C
ATOM   1882  CB   ILE C3011       13.178  26.600  12.239  1.00 25.68           C
ATOM   1883  CG2  ILE C3011       14.270  27.609  11.941  1.00 24.95           C
ATOM   1884  CG1  ILE C3011       12.274  26.364  11.022  1.00 25.90           C
ATOM   1885  CD1  ILE C3011       11.308  27.501  10.737  1.00 25.60           C
ATOM   1886  C    ILE C3011       14.701  24.681  11.616  1.00 27.06           C
ATOM   1887  O    ILE C3011       15.856  25.091  11.476  1.00 27.35           O
ATOM   1888  N    GLU C3012       14.182  23.700  10.885  1.00 28.16           N
ATOM   1889  CA   GLU C3012       14.937  23.048   9.829  1.00 29.36           C
ATOM   1890  CB   GLU C3012       15.410  21.664  10.278  1.00 30.33           C
ATOM   1891  CG   GLU C3012       16.347  21.633  11.467  1.00 31.58           C
ATOM   1892  CD   GLU C3012       17.722  22.207  11.164  1.00 32.87           C
ATOM   1893  OE1  GLU C3012       18.082  22.322   9.965  1.00 32.65           O
ATOM   1894  OE2  GLU C3012       18.447  22.529  12.138  1.00 32.87           O
ATOM   1895  C    GLU C3012       14.097  22.872   8.580  1.00 29.90           C
ATOM   1896  O    GLU C3012       12.906  22.548   8.647  1.00 29.35           O
ATOM   1897  N    GLU C3013       14.729  23.095   7.435  1.00 31.00           N
ATOM   1898  CA   GLU C3013       14.067  22.913   6.153  1.00 32.07           C
ATOM   1899  CB   GLU C3013       14.782  23.722   5.075  1.00 33.32           C
ATOM   1900  CG   GLU C3013       14.202  23.564   3.684  1.00 35.05           C
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ATOM   1901   CD   GLU  C3013      15.142   24.089    2.614   1.00  36.48          C
ATOM   1902   OE1  GLU  C3013      15.645   25.228    2.761   1.00  36.82          O
ATOM   1903   OE2  GLU  C3013      15.376   23.365    1.622   1.00  37.39          O
ATOM   1904   C    GLU  C3013      14.206   21.418    5.873   1.00  31.77          C
ATOM   1905   O    GLU  C3013      15.306   20.877    5.914   1.00  31.08          O
ATOM   1906   N    LEU  C3014      13.093   20.750    5.614   1.00  32.39          N
ATOM   1907   CA   LEU  C3014      13.130   19.318    5.360   1.00  33.65          C
ATOM   1908   CB   LEU  C3014      11.718   18.794    5.080   1.00  33.57          C
ATOM   1909   CG   LEU  C3014      10.813   18.685    6.313   1.00  34.16          C
ATOM   1910   CD1  LEU  C3014       9.416   18.252    5.906   1.00  34.65          C
ATOM   1911   CD2  LEU  C3014      11.404   17.680    7.280   1.00  34.38          C
ATOM   1912   C    LEU  C3014      14.069   18.946    4.220   1.00  34.37          C
ATOM   1913   O    LEU  C3014      14.736   17.913    4.271   1.00  34.47          O
ATOM   1914   N    ALA  C3015      14.128   19.801    3.204   1.00  35.44          N
ATOM   1915   CA   ALA  C3015      14.982   19.572    2.047   1.00  36.79          C
ATOM   1916   CB   ALA  C3015      14.749   20.655    1.011   1.00  36.53          C
ATOM   1917   C    ALA  C3015      16.457   19.511    2.418   1.00  37.84          C
ATOM   1918   O    ALA  C3015      17.215   18.737    1.831   1.00  38.53          O
ATOM   1919   N    SER  C3016      16.863   20.322    3.391   1.00  39.07          N
ATOM   1920   CA   SER  C3016      18.253   20.349    3.838   1.00  40.09          C
ATOM   1921   CB   SER  C3016      18.473   21.478    4.847   1.00  40.11          C
ATOM   1922   OG   SER  C3016      18.172   22.734    4.271   1.00  41.50          O
ATOM   1923   C    SER  C3016      18.628   19.026    4.481   1.00  40.95          C
ATOM   1924   O    SER  C3016      19.757   18.552    4.340   1.00  41.12          O
ATOM   1925   N    ILE  C3017      17.683   18.428    5.197   1.00  41.82          N
ATOM   1926   CA   ILE  C3017      17.951   17.158    5.849   1.00  43.16          C
ATOM   1927   CB   ILE  C3017      16.799   16.768    6.795   1.00  42.90          C
ATOM   1928   CG2  ILE  C3017      17.170   15.527    7.598   1.00  42.32          C
ATOM   1929   CG1  ILE  C3017      16.518   17.924    7.759   1.00  43.05          C
ATOM   1930   CD1  ILE  C3017      17.709   18.332    8.597   1.00  42.53          C
ATOM   1931   C    ILE  C3017      18.165   16.076    4.789   1.00  44.24          C
ATOM   1932   O    ILE  C3017      19.033   15.215    4.941   1.00  44.09          O
ATOM   1933   N    GLU  C3018      17.383   16.128    3.713   1.00  45.44          N
ATOM   1934   CA   GLU  C3018      17.530   15.158    2.637   1.00  47.05          C
ATOM   1935   CB   GLU  C3018      16.516   15.411    1.524   1.00  47.54          C
ATOM   1936   CG   GLU  C3018      15.158   14.805    1.755   1.00  48.25          C
ATOM   1937   CD   GLU  C3018      14.383   14.664    0.463   1.00  48.87          C
ATOM   1938   OE1  GLU  C3018      14.159   15.686   -0.220   1.00  49.40          O
ATOM   1939   OE2  GLU  C3018      14.005   13.525    0.126   1.00  49.49          O
ATOM   1940   C    GLU  C3018      18.929   15.261    2.048   1.00  47.90          C
ATOM   1941   O    GLU  C3018      19.696   14.299    2.083   1.00  47.96          O
ATOM   1942   N    SER  C3019      19.248   16.429    1.495   1.00  48.89          N
ATOM   1943   CA   SER  C3019      20.560   16.658    0.905   1.00  49.72          C
ATOM   1944   CB   SER  C3019      20.815   18.152    0.713   1.00  49.87          C
ATOM   1945   OG   SER  C3019      19.977   18.685   -0.295   1.00  50.04          O
ATOM   1946   C    SER  C3019      21.614   16.078    1.825   1.00  50.34          C
ATOM   1947   O    SER  C3019      22.506   15.362    1.380   1.00  50.79          O
ATOM   1948   N    ALA  C3020      21.504   16.380    3.114   1.00  50.84          N
ATOM   1949   CA   ALA  C3020      22.461   15.860    4.083   1.00  51.57          C
ATOM   1950   CB   ALA  C3020      22.054   16.266    5.491   1.00  51.45          C
ATOM   1951   C    ALA  C3020      22.511   14.338    3.960   1.00  52.20          C
ATOM   1952   O    ALA  C3020      23.585   13.752    3.811   1.00  52.03          O
ATOM   1953   N    VAL  C3021      21.337   13.711    4.013   1.00  53.10          N
ATOM   1954   CA   VAL  C3021      21.212   12.259    3.897   1.00  53.96          C
ATOM   1955   CB   VAL  C3021      19.730   11.818    3.969   1.00  53.97          C
ATOM   1956   CG1  VAL  C3021      19.609   10.329    3.671   1.00  54.14          C
ATOM   1957   CG2  VAL  C3021      19.165   12.124    5.340   1.00  53.98          C
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ATOM   1958  C   VAL C3021      21.788  11.793   2.566  1.00 54.57           C
ATOM   1959  O   VAL C3021      22.424  10.740   2.481  1.00 54.43           O
ATOM   1960  N   THR C3022      21.553  12.591   1.530  1.00 55.21           N
ATOM   1961  CA  THR C3022      22.041  12.293   0.194  1.00 55.84           C
ATOM   1962  CB  THR C3022      21.456  13.283  -0.831  1.00 55.80           C
ATOM   1963  OG1 THR C3022      20.034  13.124  -0.878  1.00 55.98           O
ATOM   1964  CG2 THR C3022      22.036  13.036  -2.214  1.00 55.79           C
ATOM   1965  C   THR C3022      23.566  12.355   0.155  1.00 56.35           C
ATOM   1966  O   THR C3022      24.213  11.386  -0.230  1.00 56.58           O
ATOM   1967  N   ARG C3023      24.135  13.489   0.557  1.00 56.81           N
ATOM   1968  CA  ARG C3023      25.586  13.650   0.567  1.00 57.20           C
ATOM   1969  CB  ARG C3023      25.966  15.015   1.151  1.00 57.25           C
ATOM   1970  CG  ARG C3023      27.463  15.289   1.151  1.00 57.60           C
ATOM   1971  CD  ARG C3023      27.782  16.762   1.388  1.00 57.64           C
ATOM   1972  NE  ARG C3023      27.410  17.222   2.722  0.05 57.76           N
ATOM   1973  CZ  ARG C3023      27.609  18.460   3.163  0.05 57.81           C
ATOM   1974  NH1 ARG C3023      28.176  19.364   2.374  0.05 57.84           N
ATOM   1975  NH2 ARG C3023      27.245  18.796   4.393  0.05 57.82           N
ATOM   1976  C   ARG C3023      26.203  12.522   1.390  1.00 57.47           C
ATOM   1977  O   ARG C3023      26.328  11.402   0.903  1.00 57.73           O
ATOM   1978  N   HIS C3024      26.592  12.806   2.630  1.00 57.66           N
ATOM   1979  CA  HIS C3024      27.168  11.773   3.486  1.00 57.79           C
ATOM   1980  CB  HIS C3024      27.968  12.404   4.627  0.05 57.91           C
ATOM   1981  CG  HIS C3024      29.442  12.449   4.375  0.05 58.00           C
ATOM   1982  CD2 HIS C3024      30.301  13.491   4.278  0.05 58.04           C
ATOM   1983  ND1 HIS C3024      30.198  11.312   4.187  0.05 58.04           N
ATOM   1984  CE1 HIS C3024      31.459  11.651   3.986  0.05 58.06           C
ATOM   1985  NE2 HIS C3024      31.549  12.968   4.036  0.05 58.07           N
ATOM   1986  C   HIS C3024      26.069  10.873   4.054  1.00 57.96           C
ATOM   1987  O   HIS C3024      25.413  11.223   5.038  1.00 58.10           O
ATOM   1988  N   GLU C3025      25.874   9.710   3.435  1.00 57.92           N
ATOM   1989  CA  GLU C3025      24.846   8.773   3.879  1.00 57.71           C
ATOM   1990  CB  GLU C3025      24.824   7.535   2.976  1.00 58.27           C
ATOM   1991  CG  GLU C3025      25.979   6.571   3.189  1.00 59.11           C
ATOM   1992  CD  GLU C3025      25.784   5.259   2.446  1.00 59.59           C
ATOM   1993  OE1 GLU C3025      24.749   4.592   2.673  1.00 59.65           O
ATOM   1994  OE2 GLU C3025      26.665   4.893   1.637  1.00 59.98           O
ATOM   1995  C   GLU C3025      25.029   8.341   5.336  1.00 57.11           C
ATOM   1996  O   GLU C3025      24.089   7.857   5.974  1.00 57.33           O
ATOM   1997  N   GLY C3026      26.238   8.508   5.861  1.00 56.15           N
ATOM   1998  CA  GLY C3026      26.486   8.136   7.242  1.00 55.03           C
ATOM   1999  C   GLY C3026      25.890   9.170   8.177  1.00 54.19           C
ATOM   2000  O   GLY C3026      26.023   9.081   9.398  1.00 54.12           O
ATOM   2001  N   PHE C3027      25.227  10.160   7.589  1.00 53.18           N
ATOM   2002  CA  PHE C3027      24.601  11.238   8.343  1.00 52.05           C
ATOM   2003  CB  PHE C3027      23.817  12.142   7.386  1.00 52.10           C
ATOM   2004  CG  PHE C3027      23.129  13.289   8.059  1.00 52.03           C
ATOM   2005  CD1 PHE C3027      23.859  14.233   8.768  1.00 51.96           C
ATOM   2006  CD2 PHE C3027      21.743  13.427   7.984  1.00 52.34           C
ATOM   2007  CE1 PHE C3027      23.221  15.304   9.398  1.00 52.41           C
ATOM   2008  CE2 PHE C3027      21.092  14.492   8.609  1.00 52.33           C
ATOM   2009  CZ  PHE C3027      21.833  15.434   9.319  1.00 52.40           C
ATOM   2010  C   PHE C3027      23.676  10.720   9.443  1.00 51.01           C
ATOM   2011  O   PHE C3027      23.914  10.957  10.628  1.00 51.01           O
ATOM   2012  N   ALA C3028      22.631  10.002   9.042  1.00 49.81           N
ATOM   2013  CA  ALA C3028      21.648   9.463   9.979  1.00 48.74           C
ATOM   2014  CB  ALA C3028      20.608   8.645   9.231  1.00 48.50           C
ATOM   2015  C   ALA C3028      22.240   8.630  11.104  1.00 48.04       C
ATOM   2016  O   ALA C3028      21.865   8.802  12.266  1.00 47.95       O
ATOM   2017  N   LYS C3029      23.156   7.726  10.767  1.00 47.14       N
ATOM   2018  CA  LYS C3029      23.765   6.874  11.779  1.00 46.13       C
ATOM   2019  CB  LYS C3029      24.681   5.833  11.126  1.00 46.10       C
ATOM   2020  CG  LYS C3029      25.918   6.410  10.460  0.05 46.12       C
ATOM   2021  CD  LYS C3029      26.810   5.310   9.907  0.05 46.11       C
ATOM   2022  CE  LYS C3029      28.065   5.884   9.269  0.05 46.11       C
ATOM   2023  NZ  LYS C3029      28.873   6.675  10.238  0.05 46.11       N
ATOM   2024  C   LYS C3029      24.548   7.709  12.789  1.00 45.54       C
ATOM   2025  O   LYS C3029      24.739   7.299  13.936  1.00 45.54       O
ATOM   2026  N   ARG C3030      24.997   8.883  12.361  1.00 44.50       N
ATOM   2027  CA  ARG C3030      25.747   9.770  13.243  1.00 43.62       C
ATOM   2028  CB  ARG C3030      26.703  10.650  12.425  1.00 43.71       C
ATOM   2029  CG  ARG C3030      28.071  10.019  12.194  0.05 43.64       C
ATOM   2030  CD  ARG C3030      28.410   9.914  10.717  0.05 43.63       C
ATOM   2031  NE  ARG C3030      28.407  11.214  10.051  0.05 43.58       N
ATOM   2032  CZ  ARG C3030      28.653  11.389   8.756  0.05 43.55       C
ATOM   2033  NH1 ARG C3030      28.923  10.347   7.983  0.05 43.53       N
ATOM   2034  NH2 ARG C3030      28.626  12.608   8.234  0.05 43.55       N
ATOM   2035  C   ARG C3030      24.819  10.651  14.071  1.00 42.89       C
ATOM   2036  O   ARG C3030      25.183  11.099  15.158  1.00 42.93       O
ATOM   2037  N   VAL C3031      23.616  10.885  13.556  1.00 41.77       N
ATOM   2038  CA  VAL C3031      22.637  11.724  14.237  1.00 40.54       C
ATOM   2039  CB  VAL C3031      21.761  12.464  13.213  1.00 40.55       C
ATOM   2040  CG1 VAL C3031      20.717  13.298  13.926  1.00 40.68       C
ATOM   2041  CG2 VAL C3031      22.631  13.339  12.328  1.00 40.57       C
ATOM   2042  C   VAL C3031      21.727  10.941  15.180  1.00 39.76       C
ATOM   2043  O   VAL C3031      21.373  11.418  16.256  1.00 39.22       O
ATOM   2044  N   LEU C3032      21.353   9.736  14.771  1.00 39.10       N
ATOM   2045  CA  LEU C3032      20.470   8.905  15.572  1.00 38.53       C
ATOM   2046  CB  LEU C3032      19.453   8.223  14.656  1.00 38.36       C
ATOM   2047  CG  LEU C3032      18.612   9.150  13.767  1.00 38.42       C
ATOM   2048  CD1 LEU C3032      17.671   8.308  12.912  1.00 38.50       C
ATOM   2049  CD2 LEU C3032      17.819  10.131  14.622  1.00 37.90       C
ATOM   2050  C   LEU C3032      21.217   7.848  16.378  1.00 38.18       C
ATOM   2051  O   LEU C3032      22.395   7.585  16.134  1.00 38.41       O
ATOM   2052  N   THR C3033      20.530   7.263  17.356  1.00 37.76       N
ATOM   2053  CA  THR C3033      21.105   6.193  18.166  1.00 37.32       C
ATOM   2054  CB  THR C3033      20.636   6.248  19.638  1.00 37.17       C
ATOM   2055  OG1 THR C3033      19.233   5.967  19.704  1.00 37.15       O
ATOM   2056  CG2 THR C3033      20.900   7.612  20.236  1.00 37.54       C
ATOM   2057  C   THR C3033      20.546   4.918  17.537  1.00 37.05       C
ATOM   2058  O   THR C3033      19.725   4.992  16.623  1.00 36.86       O
ATOM   2059  N   ALA C3034      20.976   3.759  18.026  1.00 37.00       N
ATOM   2060  CA  ALA C3034      20.502   2.481  17.495  1.00 36.98       C
ATOM   2061  CB  ALA C3034      21.121   1.324  18.279  1.00 36.85       C
ATOM   2062  C   ALA C3034      18.978   2.384  17.538  1.00 36.93       C
ATOM   2063  O   ALA C3034      18.331   2.154  16.516  1.00 36.95       O
ATOM   2064  N   LEU C3035      18.401   2.553  18.721  1.00 37.04       N
ATOM   2065  CA  LEU C3035      16.951   2.480  18.844  1.00 37.28       C
ATOM   2066  CB  LEU C3035      16.522   2.844  20.271  1.00 37.10       C
ATOM   2067  CG  LEU C3035      15.183   2.291  20.770  0.05 37.08       C
ATOM   2068  CD1 LEU C3035      14.994   2.675  22.229  0.05 37.00       C
ATOM   2069  CD2 LEU C3035      14.040   2.822  19.922  0.05 37.02       C
ATOM   2070  C   LEU C3035      16.322   3.442  17.828  1.00 37.52       C
ATOM   2071  O   LEU C3035      15.418   3.065  17.084  1.00 37.65       O
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ATOM   2072  N   GLU C3036      16.814   4.678  17.790  1.00 37.89           N
ATOM   2073  CA  GLU C3036      16.299   5.679  16.854  1.00 38.14           C
ATOM   2074  CB  GLU C3036      17.007   7.031  17.063  1.00 37.82           C
ATOM   2075  CG  GLU C3036      16.486   7.857  18.244  1.00 37.71           C
ATOM   2076  CD  GLU C3036      17.305   9.128  18.490  1.00 37.80           C
ATOM   2077  OE1 GLU C3036      16.865   9.989  19.283  1.00 37.10           O
ATOM   2078  OE2 GLU C3036      18.397   9.265  17.896  1.00 37.62           O
ATOM   2079  C   GLU C3036      16.462   5.232  15.398  1.00 38.18           C
ATOM   2080  O   GLU C3036      15.629   5.551  14.553  1.00 38.25           O
ATOM   2081  N   MET C3037      17.533   4.499  15.104  1.00 38.56           N
ATOM   2082  CA  MET C3037      17.769   4.022  13.743  1.00 39.53           C
ATOM   2083  CB  MET C3037      19.196   3.495  13.591  1.00 40.21           C
ATOM   2084  CG  MET C3037      20.230   4.576  13.312  1.00 41.61           C
ATOM   2085  SD  MET C3037      19.932   5.428  11.726  1.00 43.58           S
ATOM   2086  CE  MET C3037      20.794   4.327  10.578  1.00 42.57           C
ATOM   2087  C   MET C3037      16.782   2.935  13.337  1.00 39.68           C
ATOM   2088  O   MET C3037      16.356   2.881  12.186  1.00 39.73           O
ATOM   2089  N   GLU C3038      16.421   2.072  14.284  1.00 39.82           N
ATOM   2090  CA  GLU C3038      15.473   0.995  14.012  1.00 39.88           C
ATOM   2091  CB  GLU C3038      15.205   0.190  15.289  1.00 39.75           C
ATOM   2092  CG  GLU C3038      16.451  -0.428  15.905  0.05 39.71           C
ATOM   2093  CD  GLU C3038      16.163  -1.139  17.213  0.05 39.67           C
ATOM   2094  OE1 GLU C3038      15.344  -2.083  17.210  0.05 39.64           O
ATOM   2095  OE2 GLU C3038      16.755  -0.755  18.243  0.05 39.61           O
ATOM   2096  C   GLU C3038      14.175   1.609  13.500  1.00 40.09           C
ATOM   2097  O   GLU C3038      13.556   1.105  12.559  1.00 40.19           O
ATOM   2098  N   ARG C3039      13.774   2.709  14.126  1.00 40.05           N
ATOM   2099  CA  ARG C3039      12.560   3.418  13.744  1.00 40.26           C
ATOM   2100  CB  ARG C3039      12.230   4.466  14.811  1.00 40.88           C
ATOM   2101  CG  ARG C3039      11.106   5.425  14.468  1.00 41.43           C
ATOM   2102  CD  ARG C3039       9.756   4.739  14.377  1.00 42.67           C
ATOM   2103  NE  ARG C3039       8.673   5.723  14.425  1.00 43.58           N
ATOM   2104  CZ  ARG C3039       7.394   5.459  14.169  1.00 43.85           C
ATOM   2105  NH1 ARG C3039       7.007   4.231  13.838  1.00 43.59           N
ATOM   2106  NH2 ARG C3039       6.498   6.435  14.234  1.00 44.15           N
ATOM   2107  C   ARG C3039      12.755   4.090  12.384  1.00 39.98           C
ATOM   2108  O   ARG C3039      11.891   4.009  11.506  1.00 39.45           O
ATOM   2109  N   PHE C3040      13.901   4.745  12.216  1.00 40.04           N
ATOM   2110  CA  PHE C3040      14.218   5.440  10.968  1.00 40.26           C
ATOM   2111  CB  PHE C3040      15.603   6.074  11.061  1.00 40.27           C
ATOM   2112  CG  PHE C3040      16.022   6.804   9.814  1.00 40.95           C
ATOM   2113  CD1 PHE C3040      15.431   8.015   9.466  1.00 41.11           C
ATOM   2114  CD2 PHE C3040      17.013   6.282   8.989  1.00 41.10           C
ATOM   2115  CE1 PHE C3040      15.822   8.699   8.315  1.00 41.43           C
ATOM   2116  CE2 PHE C3040      17.412   6.956   7.835  1.00 41.44           C
ATOM   2117  CZ  PHE C3040      16.815   8.169   7.497  1.00 41.61           C
ATOM   2118  C   PHE C3040      14.181   4.507   9.756  1.00 40.43           C
ATOM   2119  O   PHE C3040      13.467   4.757   8.784  1.00 39.60           O
ATOM   2120  N   THR C3041      14.956   3.429   9.833  1.00 40.82           N
ATOM   2121  CA  THR C3041      15.043   2.459   8.749  1.00 41.42           C
ATOM   2122  CB  THR C3041      16.154   1.435   9.018  1.00 41.55           C
ATOM   2123  OG1 THR C3041      15.782   0.597  10.121  1.00 42.56           O
ATOM   2124  CG2 THR C3041      17.450   2.149   9.351  1.00 41.22           C
ATOM   2125  C   THR C3041      13.749   1.702   8.463  1.00 41.42           C
ATOM   2126  O   THR C3041      13.630   1.072   7.415  1.00 41.80           O
ATOM   2127  N   SER C3042      12.783   1.757   9.377  1.00 41.30           N
ATOM   2128  CA  SER C3042      11.521   1.059   9.152  1.00 41.35           C
ATOM   2129  CB  SER C3042      10.998   0.445  10.454  1.00 41.25           C
ATOM   2130  OG  SER C3042      10.501   1.442  11.324  1.00 42.03           O
ATOM   2131  C   SER C3042      10.469   1.996   8.569  1.00 41.30           C
ATOM   2132  O   SER C3042       9.334   1.589   8.311  1.00 41.45           O
ATOM   2133  N   LEU C3043      10.850   3.255   8.373  1.00 41.13           N
ATOM   2134  CA  LEU C3043       9.956   4.262   7.808  1.00 40.94           C
ATOM   2135  CB  LEU C3043      10.026   5.566   8.618  1.00 40.70           C
ATOM   2136  CG  LEU C3043       9.382   5.618  10.012  1.00 40.56           C
ATOM   2137  CD1 LEU C3043       9.835   6.871  10.735  1.00 40.07           C
ATOM   2138  CD2 LEU C3043       7.859   5.586   9.891  1.00 40.06           C
ATOM   2139  C   LEU C3043      10.398   4.528   6.375  1.00 41.07           C
ATOM   2140  O   LEU C3043      11.494   4.128   5.978  1.00 40.93           O
ATOM   2141  N   LYS C3044       9.550   5.203   5.604  1.00 41.26           N
ATOM   2142  CA  LYS C3044       9.871   5.513   4.214  1.00 41.42           C
ATOM   2143  CB  LYS C3044       9.481   4.346   3.307  1.00 42.49           C
ATOM   2144  CG  LYS C3044       7.982   4.199   3.107  1.00 43.64           C
ATOM   2145  CD  LYS C3044       7.678   3.191   2.012  1.00 45.17           C
ATOM   2146  CE  LYS C3044       6.206   3.228   1.616  1.00 45.99           C
ATOM   2147  NZ  LYS C3044       5.900   2.249   0.535  1.00 47.05           N
ATOM   2148  C   LYS C3044       9.147   6.768   3.739  1.00 40.92           C
ATOM   2149  O   LYS C3044       8.191   7.219   4.365  1.00 40.90           O
ATOM   2150  N   GLY C3045       9.605   7.320   2.621  1.00 40.22           N
ATOM   2151  CA  GLY C3045       8.986   8.510   2.072  1.00 39.26           C
ATOM   2152  C   GLY C3045       9.182   9.736   2.937  1.00 38.68           C
ATOM   2153  O   GLY C3045      10.142   9.829   3.694  1.00 38.24           O
ATOM   2154  N   ARG C3046       8.260  10.683   2.818  1.00 38.56           N
ATOM   2155  CA  ARG C3046       8.318  11.921   3.589  1.00 38.49           C
ATOM   2156  CB  ARG C3046       7.107  12.793   3.251  1.00 38.44           C
ATOM   2157  CG  ARG C3046       7.104  14.158   3.912  0.05 38.46           C
ATOM   2158  CD  ARG C3046       5.887  14.963   3.483  0.05 38.40           C
ATOM   2159  NE  ARG C3046       5.874  15.200   2.042  0.05 38.36           N
ATOM   2160  CZ  ARG C3046       4.887  15.809   1.393  0.05 38.32           C
ATOM   2161  NH1 ARG C3046       4.963  15.982   0.081  0.05 38.29           N
ATOM   2162  NH2 ARG C3046       3.822  16.241   2.055  0.05 38.31           N
ATOM   2163  C   ARG C3046       8.372  11.647   5.093  1.00 38.25           C
ATOM   2164  O   ARG C3046       9.027  12.365   5.830  1.00 38.13           O
ATOM   2165  N   ARG C3047       7.696  10.595   5.538  1.00 38.32           N
ATOM   2166  CA  ARG C3047       7.673  10.234   6.953  1.00 38.52           C
ATOM   2167  CB  ARG C3047       6.727   9.051   7.169  1.00 39.67           C
ATOM   2168  CG  ARG C3047       5.251   9.432   7.225  1.00 41.67           C
ATOM   2169  CD  ARG C3047       4.369   8.277   6.767  1.00 43.70           C
ATOM   2170  NE  ARG C3047       3.141   8.152   7.550  1.00 45.24           N
ATOM   2171  CZ  ARG C3047       3.112   7.824   8.840  1.00 46.12           C
ATOM   2172  NH1 ARG C3047       4.248   7.589   9.495  1.00 46.08           N
ATOM   2173  NH2 ARG C3047       1.947   7.722   9.474  1.00 45.94           N
ATOM   2174  C   ARG C3047       9.042   9.906   7.554  1.00 38.04           C
ATOM   2175  O   ARG C3047       9.287  10.174   8.731  1.00 37.75           O
ATOM   2176  N   GLN C3048       9.931   9.320   6.757  1.00 37.49           N
ATOM   2177  CA  GLN C3048      11.258   8.966   7.251  1.00 36.91           C
ATOM   2178  CB  GLN C3048      11.912   7.919   6.349  1.00 36.94           C
ATOM   2179  CG  GLN C3048      13.283   7.496   6.849  1.00 37.10           C
ATOM   2180  CD  GLN C3048      14.092   6.744   5.813  1.00 37.40           C
ATOM   2181  OE1 GLN C3048      14.233   7.196   4.680  1.00 37.42           O
ATOM   2182  NE2 GLN C3048      14.643   5.600   6.202  1.00 37.18           N
ATOM   2183  C   GLN C3048      12.186  10.176   7.367  1.00 36.61           C
ATOM   2184  O   GLN C3048      12.971  10.284   8.315  1.00 36.44           O
ATOM   2185  N   ILE C3049      12.101  11.082   6.403  1.00 35.91           N
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ATOM   2186  CA  ILE C3049      12.932  12.271   6.429  1.00 35.80      C
ATOM   2187  CB  ILE C3049      12.906  12.991   5.054  1.00 36.41      C
ATOM   2188  CG2 ILE C3049      11.482  13.209   4.607  1.00 37.11      C
ATOM   2189  CG1 ILE C3049      13.678  14.307   5.136  1.00 36.64      C
ATOM   2190  CD1 ILE C3049      15.150  14.108   5.433  1.00 37.22      C
ATOM   2191  C   ILE C3049      12.436  13.201   7.542  1.00 35.41      C
ATOM   2192  O   ILE C3049      13.231  13.824   8.254  1.00 35.47      O
ATOM   2193  N   GLU C3050      11.119  13.280   7.707  1.00 34.48      N
ATOM   2194  CA  GLU C3050      10.546  14.118   8.756  1.00 33.55      C
ATOM   2195  CB  GLU C3050       9.023  14.074   8.699  1.00 34.18      C
ATOM   2196  CG  GLU C3050       8.471  14.609   7.410  1.00 36.22      C
ATOM   2197  CD  GLU C3050       7.005  14.309   7.242  1.00 37.41      C
ATOM   2198  OE1 GLU C3050       6.543  13.291   7.807  1.00 38.55      O
ATOM   2199  OE2 GLU C3050       6.318  15.078   6.531  1.00 37.87      O
ATOM   2200  C   GLU C3050      11.018  13.620  10.116  1.00 32.30      C
ATOM   2201  O   GLU C3050      11.275  14.412  11.023  1.00 31.96      O
ATOM   2202  N   TYR C3051      11.130  12.303  10.251  1.00 30.44      N
ATOM   2203  CA  TYR C3051      11.574  11.715  11.501  1.00 29.38      C
ATOM   2204  CB  TYR C3051      11.438  10.191  11.433  1.00 28.33      C
ATOM   2205  CG  TYR C3051      11.936   9.478  12.675  1.00 27.96      C
ATOM   2206  CD1 TYR C3051      13.234   8.964  12.741  1.00 27.15      C
ATOM   2207  CE1 TYR C3051      13.712   8.371  13.904  1.00 26.96      C
ATOM   2208  CD2 TYR C3051      11.127   9.373  13.809  1.00 27.47      C
ATOM   2209  CE2 TYR C3051      11.593   8.788  14.967  1.00 27.13      C
ATOM   2210  CZ  TYR C3051      12.885   8.290  15.014  1.00 27.21      C
ATOM   2211  OH  TYR C3051      13.344   7.735  16.187  1.00 27.00      O
ATOM   2212  C   TYR C3051      13.019  12.117  11.818  1.00 29.01      C
ATOM   2213  O   TYR C3051      13.342  12.486  12.946  1.00 28.83      O
ATOM   2214  N   LEU C3052      13.886  12.063  10.812  1.00 28.73      N
ATOM   2215  CA  LEU C3052      15.287  12.417  11.009  1.00 28.07      C
ATOM   2216  CB  LEU C3052      16.105  12.059   9.761  1.00 27.77      C
ATOM   2217  CG  LEU C3052      17.603  12.372   9.816  1.00 28.06      C
ATOM   2218  CD1 LEU C3052      18.267  11.639  10.972  1.00 28.26      C
ATOM   2219  CD2 LEU C3052      18.241  11.957   8.516  1.00 28.46      C
ATOM   2220  C   LEU C3052      15.419  13.909  11.311  1.00 27.59      C
ATOM   2221  O   LEU C3052      16.156  14.309  12.217  1.00 26.99      O
ATOM   2222  N   ALA C3053      14.704  14.727  10.544  1.00 27.06      N
ATOM   2223  CA  ALA C3053      14.743  16.168  10.738  1.00 26.76      C
ATOM   2224  CB  ALA C3053      13.898  16.852   9.691  1.00 26.56      C
ATOM   2225  C   ALA C3053      14.223  16.489  12.134  1.00 26.71      C
ATOM   2226  O   ALA C3053      14.802  17.298  12.854  1.00 26.43      O
ATOM   2227  N   GLY C3054      13.130  15.831  12.510  1.00 26.77      N
ATOM   2228  CA  GLY C3054      12.541  16.043  13.815  1.00 26.67      C
ATOM   2229  C   GLY C3054      13.512  15.753  14.934  1.00 26.53      C
ATOM   2230  O   GLY C3054      13.611  16.521  15.882  1.00 26.44      O
ATOM   2231  N   ARG C3055      14.231  14.643  14.836  1.00 26.68      N
ATOM   2232  CA  ARG C3055      15.198  14.290  15.870  1.00 26.82      C
ATOM   2233  CB  ARG C3055      15.705  12.868  15.666  1.00 26.65      C
ATOM   2234  CG  ARG C3055      14.968  11.843  16.498  1.00 26.91      C
ATOM   2235  CD  ARG C3055      13.458  11.922  16.298  1.00 27.49      C
ATOM   2236  NE  ARG C3055      12.759  11.110  17.292  1.00 27.69      N
ATOM   2237  CZ  ARG C3055      11.442  11.086  17.454  1.00 27.76      C
ATOM   2238  NH1 ARG C3055      10.662  11.831  16.685  1.00 27.51      N
ATOM   2239  NH2 ARG C3055      10.906  10.324  18.398  1.00 28.13      N
ATOM   2240  C   ARG C3055      16.360  15.260  15.869  1.00 26.96      C
ATOM   2241  O   ARG C3055      16.834  15.667  16.928  1.00 26.54      O
ATOM   2242  N   TRP C3056      16.816  15.631  14.676  1.00 27.71      N
ATOM    2243  CA   TRP C3056       17.917  16.575  14.556  1.00 28.70           C
ATOM    2244  CB   TRP C3056       18.247  16.837  13.082  1.00 30.14           C
ATOM    2245  CG   TRP C3056       19.074  18.069  12.881  1.00 32.25           C
ATOM    2246  CD2  TRP C3056       20.495  18.129  12.703  1.00 33.03           C
ATOM    2247  CE2  TRP C3056       20.854  19.497  12.662  1.00 33.33           C
ATOM    2248  CE3  TRP C3056       21.500  17.163  12.579  1.00 33.56           C
ATOM    2249  CD1  TRP C3056       18.639  19.370  12.930  1.00 32.92           C
ATOM    2250  NE1  TRP C3056       19.704  20.230  12.803  1.00 33.50           N
ATOM    2251  CZ2  TRP C3056       22.175  19.920  12.505  1.00 33.41           C
ATOM    2252  CZ3  TRP C3056       22.818  17.587  12.422  1.00 33.92           C
ATOM    2253  CH2  TRP C3056       23.141  18.954  12.387  1.00 33.82           C
ATOM    2254  C    TRP C3056       17.498  17.875  15.230  1.00 28.10           C
ATOM    2255  O    TRP C3056       18.144  18.357  16.163  1.00 27.48           O
ATOM    2256  N    SER C3057       16.397  18.429  14.749  1.00 27.65           N
ATOM    2257  CA   SER C3057       15.868  19.667  15.288  1.00 27.54           C
ATOM    2258  CB   SER C3057       14.513  19.959  14.654  1.00 27.86           C
ATOM    2259  OG   SER C3057       14.233  21.344  14.718  1.00 29.93           O
ATOM    2260  C    SER C3057       15.731  19.622  16.812  1.00 26.85           C
ATOM    2261  O    SER C3057       16.059  20.588  17.503  1.00 27.24           O
ATOM    2262  N    ALA C3058       15.257  18.501  17.340  1.00 25.77           N
ATOM    2263  CA   ALA C3058       15.080  18.369  18.780  1.00 25.50           C
ATOM    2264  CB   ALA C3058       14.334  17.077  19.094  1.00 25.02           C
ATOM    2265  C    ALA C3058       16.411  18.409  19.546  1.00 25.26           C
ATOM    2266  O    ALA C3058       16.513  19.024  20.607  1.00 24.25           O
ATOM    2267  N    LYS C3059       17.430  17.752  19.000  1.00 25.32           N
ATOM    2268  CA   LYS C3059       18.736  17.704  19.646  1.00 25.14           C
ATOM    2269  CB   LYS C3059       19.568  16.577  19.035  1.00 24.87           C
ATOM    2270  CG   LYS C3059       18.928  15.218  19.254  1.00 24.63           C
ATOM    2271  CD   LYS C3059       19.667  14.091  18.570  1.00 24.80           C
ATOM    2272  CE   LYS C3059       18.998  12.746  18.869  1.00 24.92           C
ATOM    2273  NZ   LYS C3059       19.674  11.614  18.185  1.00 24.83           N
ATOM    2274  C    LYS C3059       19.466  19.033  19.547  1.00 25.56           C
ATOM    2275  O    LYS C3059       20.262  19.383  20.415  1.00 25.33           O
ATOM    2276  N    GLU C3060       19.183  19.784  18.493  1.00 26.00           N
ATOM    2277  CA   GLU C3060       19.818  21.076  18.326  1.00 26.76           C
ATOM    2278  CB   GLU C3060       19.568  21.618  16.919  1.00 28.10           C
ATOM    2279  CG   GLU C3060       20.545  22.717  16.530  1.00 31.38           C
ATOM    2280  CD   GLU C3060       22.005  22.278  16.691  1.00 33.19           C
ATOM    2281  OE1  GLU C3060       22.444  21.369  15.947  1.00 33.60           O
ATOM    2282  OE2  GLU C3060       22.709  22.839  17.569  1.00 34.17           O
ATOM    2283  C    GLU C3060       19.243  22.023  19.377  1.00 26.31           C
ATOM    2284  O    GLU C3060       19.985  22.698  20.089  1.00 25.94           O
ATOM    2285  N    ALA C3061       17.914  22.048  19.477  1.00 25.95           N
ATOM    2286  CA   ALA C3061       17.221  22.899  20.442  1.00 25.01           C
ATOM    2287  CB   ALA C3061       15.712  22.700  20.342  1.00 24.05           C
ATOM    2288  C    ALA C3061       17.696  22.562  21.846  1.00 24.62           C
ATOM    2289  O    ALA C3061       17.925  23.457  22.663  1.00 24.28           O
ATOM    2290  N    PHE C3062       17.837  21.271  22.129  1.00 24.17           N
ATOM    2291  CA   PHE C3062       18.301  20.850  23.440  1.00 24.63           C
ATOM    2292  CB   PHE C3062       18.224  19.321  23.605  1.00 24.68           C
ATOM    2293  CG   PHE C3062       18.875  18.828  24.871  1.00 24.04           C
ATOM    2294  CD1  PHE C3062       20.238  18.538  24.900  1.00 24.34           C
ATOM    2295  CD2  PHE C3062       18.152  18.756  26.053  1.00 23.91           C
ATOM    2296  CE1  PHE C3062       20.872  18.189  26.093  1.00 24.30           C
ATOM    2297  CE2  PHE C3062       18.774  18.411  27.255  1.00 24.14           C
ATOM    2298  CZ   PHE C3062       20.139  18.128  27.274  1.00 24.07           C
ATOM    2299  C    PHE C3062       19.732  21.316  23.701  1.00 24.85           C
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ATOM     2300  O    PHE C3062      20.054  21.744  24.804  1.00 24.51          O
ATOM     2301  N    SER C3063      20.589  21.219  22.689  1.00 25.44          N
ATOM     2302  CA   SER C3063      21.976  21.650  22.833  1.00 26.48          C
ATOM     2303  CB   SER C3063      22.777  21.312  21.576  1.00 26.81          C
ATOM     2304  OG   SER C3063      22.872  19.910  21.403  1.00 28.20          O
ATOM     2305  C    SER C3063      22.059  23.149  23.082  1.00 26.77          C
ATOM     2306  O    SER C3063      22.891  23.614  23.859  1.00 26.78          O
ATOM     2307  N    LYS C3064      21.194  23.902  22.416  1.00 26.78          N
ATOM     2308  CA   LYS C3064      21.188  25.342  22.565  1.00 27.25          C
ATOM     2309  CB   LYS C3064      20.379  25.973  21.431  1.00 26.90          C
ATOM     2310  CG   LYS C3064      20.971  25.696  20.059  1.00 26.47          C
ATOM     2311  CD   LYS C3064      20.066  26.159  18.938  1.00 26.20          C
ATOM     2312  CE   LYS C3064      19.799  27.664  18.988  1.00 26.50          C
ATOM     2313  NZ   LYS C3064      18.996  28.088  17.806  1.00 26.49          N
ATOM     2314  C    LYS C3064      20.616  25.718  23.923  1.00 28.08          C
ATOM     2315  O    LYS C3064      20.987  26.738  24.500  1.00 27.79          O
ATOM     2316  N    ALA C3065      19.717  24.882  24.433  1.00 29.11          N
ATOM     2317  CA   ALA C3065      19.111  25.124  25.735  1.00 30.40          C
ATOM     2318  CB   ALA C3065      17.957  24.163  25.968  1.00 29.37          C
ATOM     2319  C    ALA C3065      20.179  24.932  26.804  1.00 31.79          C
ATOM     2320  O    ALA C3065      20.228  25.668  27.786  1.00 31.85          O
ATOM     2321  N    MET C3066      21.035  23.939  26.595  1.00 33.85          N
ATOM     2322  CA   MET C3066      22.114  23.628  27.524  1.00 36.16          C
ATOM     2323  CB   MET C3066      22.666  22.232  27.242  1.00 36.40          C
ATOM     2324  CG   MET C3066      21.804  21.097  27.752  1.00 37.31          C
ATOM     2325  SD   MET C3066      21.824  20.993  29.551  1.00 38.61          S
ATOM     2326  CE   MET C3066      23.502  20.468  29.811  1.00 38.12          C
ATOM     2327  C    MET C3066      23.247  24.638  27.413  1.00 37.57          C
ATOM     2328  O    MET C3066      23.958  24.893  28.379  1.00 37.83          O
ATOM     2329  N    GLY C3067      23.411  25.209  26.226  1.00 39.17          N
ATOM     2330  CA   GLY C3067      24.470  26.177  26.024  1.00 41.14          C
ATOM     2331  C    GLY C3067      25.772  25.475  25.697  1.00 42.59          C
ATOM     2332  O    GLY C3067      26.831  25.822  26.226  1.00 42.74          O
ATOM     2333  N    THR C3068      25.687  24.476  24.825  1.00 43.64          N
ATOM     2334  CA   THR C3068      26.853  23.710  24.418  1.00 44.94          C
ATOM     2335  CB   THR C3068      26.723  22.243  24.877  1.00 45.62          C
ATOM     2336  OG1  THR C3068      27.927  21.529  24.559  1.00 46.68          O
ATOM     2337  CG2  THR C3068      25.539  21.572  24.188  1.00 45.83          C
ATOM     2338  C    THR C3068      26.994  23.755  22.898  1.00 45.32          C
ATOM     2339  O    THR C3068      26.027  24.200  22.242  1.00 45.93          O
ATOM     2340  OXT  THR C3068      28.057  23.348  22.377  1.00 45.68          O
TER      2341       THR C3068
ATOM     2342  C    GLY C3074      25.582  13.730  21.033  1.00 50.05          C
ATOM     2343  O    GLY C3074      24.831  13.333  21.925  1.00 50.04          O
ATOM     2344  N    GLY C3074      27.008  15.502  22.091  1.00 50.49          N
ATOM     2345  CA   GLY C3074      26.990  14.201  21.354  1.00 50.33          C
ATOM     2346  N    PHE C3075      25.218  13.780  19.755  1.00 49.73          N
ATOM     2347  CA   PHE C3075      23.894  13.345  19.328  1.00 49.39          C
ATOM     2348  CB   PHE C3075      23.740  13.548  17.818  1.00 49.61          C
ATOM     2349  CG   PHE C3075      23.196  14.902  17.447  1.00 50.02          C
ATOM     2350  CD1  PHE C3075      23.555  16.036  18.178  1.00 50.35          C
ATOM     2351  CD2  PHE C3075      22.316  15.045  16.382  1.00 50.13          C
ATOM     2352  CE1  PHE C3075      23.040  17.294  17.854  1.00 50.43          C
ATOM     2353  CE2  PHE C3075      21.794  16.297  16.047  1.00 50.56          C
ATOM     2354  CZ   PHE C3075      22.156  17.424  16.784  1.00 50.60          C
ATOM     2355  C    PHE C3075      23.644  11.894  19.710  1.00 48.79          C
ATOM     2356  O    PHE C3075      22.530  11.523  20.073  1.00 48.53          O
ATOM    2357  N    GLN C3076      24.694  11.082  19.642  1.00 48.39          N
ATOM    2358  CA   GLN C3076      24.602   9.671  19.998  1.00 47.89          C
ATOM    2359  CB   GLN C3076      25.905   8.944  19.643  1.00 48.47          C
ATOM    2360  CG   GLN C3076      26.287   9.049  18.175  1.00 49.29          C
ATOM    2361  CD   GLN C3076      25.242   8.441  17.260  1.00 49.81          C
ATOM    2362  OE1  GLN C3076      25.206   8.731  16.065  1.00 50.75          O
ATOM    2363  NE2  GLN C3076      24.391   7.584  17.815  1.00 49.76          N
ATOM    2364  C    GLN C3076      24.351   9.560  21.492  1.00 47.10          C
ATOM    2365  O    GLN C3076      24.003   8.493  22.000  1.00 47.45          O
ATOM    2366  N    ASP C3077      24.533  10.676  22.190  1.00 45.97          N
ATOM    2367  CA   ASP C3077      24.331  10.727  23.631  1.00 44.90          C
ATOM    2368  CB   ASP C3077      25.397  11.612  24.271  1.00 46.44          C
ATOM    2369  CG   ASP C3077      26.800  11.083  24.036  1.00 47.82          C
ATOM    2370  OD1  ASP C3077      27.081   9.951  24.499  1.00 48.20          O
ATOM    2371  OD2  ASP C3077      27.610  11.794  23.388  1.00 48.48          O
ATOM    2372  C    ASP C3077      22.950  11.252  23.975  1.00 43.23          C
ATOM    2373  O    ASP C3077      22.557  11.280  25.140  1.00 43.47          O
ATOM    2374  N    LEU C3078      22.219  11.675  22.950  1.00 41.15          N
ATOM    2375  CA   LEU C3078      20.869  12.193  23.129  1.00 38.63          C
ATOM    2376  CB   LEU C3078      20.754  13.610  22.558  1.00 38.12          C
ATOM    2377  CG   LEU C3078      21.787  14.645  23.005  1.00 37.91          C
ATOM    2378  CD1  LEU C3078      21.511  15.974  22.313  1.00 37.65          C
ATOM    2379  CD2  LEU C3078      21.735  14.801  24.508  1.00 37.75          C
ATOM    2380  C    LEU C3078      19.921  11.272  22.376  1.00 36.97          C
ATOM    2381  O    LEU C3078      20.225  10.833  21.269  1.00 36.76          O
ATOM    2382  N    GLU C3079      18.778  10.974  22.979  1.00 34.99          N
ATOM    2383  CA   GLU C3079      17.793  10.112  22.338  1.00 33.02          C
ATOM    2384  CB   GLU C3079      17.937   8.676  22.842  1.00 33.31          C
ATOM    2385  CG   GLU C3079      16.818   7.753  22.412  1.00 34.12          C
ATOM    2386  CD   GLU C3079      17.129   6.298  22.691  1.00 34.85          C
ATOM    2387  OE1  GLU C3079      17.897   5.701  21.908  1.00 34.18          O
ATOM    2388  OE2  GLU C3079      16.616   5.754  23.699  1.00 35.70          O
ATOM    2389  C    GLU C3079      16.365  10.598  22.566  1.00 31.51          C
ATOM    2390  O    GLU C3079      15.955  10.880  23.695  1.00 31.00          O
ATOM    2391  N    VAL C3080      15.618  10.707  21.474  1.00 29.65          N
ATOM    2392  CA   VAL C3080      14.237  11.135  21.542  1.00 28.33          C
ATOM    2393  CB   VAL C3080      13.987  12.401  20.698  1.00 28.04          C
ATOM    2394  CG1  VAL C3080      12.497  12.701  20.643  1.00 27.55          C
ATOM    2395  CG2  VAL C3080      14.739  13.576  21.289  1.00 27.56          C
ATOM    2396  C    VAL C3080      13.373  10.014  21.007  1.00 28.05          C
ATOM    2397  O    VAL C3080      13.518   9.600  19.858  1.00 27.43          O
ATOM    2398  N    LEU C3081      12.482   9.513  21.853  1.00 27.62          N
ATOM    2399  CA   LEU C3081      11.578   8.445  21.455  1.00 27.82          C
ATOM    2400  CB   LEU C3081      11.724   7.235  22.391  1.00 27.48          C
ATOM    2401  CG   LEU C3081      13.107   6.575  22.533  1.00 27.65          C
ATOM    2402  CD1  LEU C3081      13.069   5.544  23.648  1.00 26.80          C
ATOM    2403  CD2  LEU C3081      13.534   5.928  21.223  1.00 26.81          C
ATOM    2404  C    LEU C3081      10.160   9.000  21.528  1.00 27.94          C
ATOM    2405  O    LEU C3081       9.965  10.194  21.744  1.00 27.66          O
ATOM    2406  N    ASN C3082       9.177   8.128  21.340  1.00 28.22          N
ATOM    2407  CA   ASN C3082       7.775   8.523  21.400  1.00 28.52          C
ATOM    2408  CB   ASN C3082       7.111   8.355  20.024  1.00 28.54          C
ATOM    2409  CG   ASN C3082       7.584   9.382  19.021  1.00 28.73          C
ATOM    2410  OD1  ASN C3082       7.295  10.569  19.148  1.00 29.62          O
ATOM    2411  ND2  ASN C3082       8.321   8.932  18.020  1.00 29.32          N
ATOM    2412  C    ASN C3082       7.053   7.647  22.422  1.00 28.28          C
ATOM    2413  O    ASN C3082       7.199   6.421  22.407  1.00 28.06          O
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ATOM   2414  N   ASN C3083       6.280   8.274  23.308  1.00 27.85           N
ATOM   2415  CA  ASN C3083       5.537   7.520  24.304  1.00 27.66           C
ATOM   2416  CB  ASN C3083       5.183   8.398  25.515  1.00 27.64           C
ATOM   2417  CG  ASN C3083       4.203   9.527  25.189  1.00 27.67           C
ATOM   2418  OD1 ASN C3083       3.949  10.384  26.033  1.00 28.51           O
ATOM   2419  ND2 ASN C3083       3.648   9.527  23.986  1.00 27.19           N
ATOM   2420  C   ASN C3083       4.287   6.942  23.664  1.00 27.84           C
ATOM   2421  O   ASN C3083       3.988   7.233  22.501  1.00 27.10           O
ATOM   2422  N   GLU C3084       3.564   6.120  24.419  1.00 28.22           N
ATOM   2423  CA  GLU C3084       2.354   5.483  23.910  1.00 28.64           C
ATOM   2424  CB  GLU C3084       1.655   4.679  25.018  1.00 29.96           C
ATOM   2425  CG  GLU C3084       1.146   5.509  26.187  1.00 31.56           C
ATOM   2426  CD  GLU C3084       2.225   5.820  27.210  1.00 33.17           C
ATOM   2427  OE1 GLU C3084       3.404   5.994  26.821  1.00 33.53           O
ATOM   2428  OE2 GLU C3084       1.888   5.903  28.411  1.00 34.64           O
ATOM   2429  C   GLU C3084       1.367   6.471  23.291  1.00 28.20           C
ATOM   2430  O   GLU C3084       0.559   6.092  22.446  1.00 28.01           O
ATOM   2431  N   ARG C3085       1.435   7.734  23.702  1.00 27.98           N
ATOM   2432  CA  ARG C3085       0.526   8.745  23.165  1.00 27.80           C
ATOM   2433  CB  ARG C3085       0.270   9.847  24.201  1.00 28.19           C
ATOM   2434  CG  ARG C3085      -0.474   9.355  25.427  1.00 29.28           C
ATOM   2435  CD  ARG C3085      -1.296  10.454  26.109  1.00 30.50           C
ATOM   2436  NE  ARG C3085      -2.245   9.862  27.052  1.00 31.26           N
ATOM   2437  CZ  ARG C3085      -1.872   9.221  28.153  1.00 32.48           C
ATOM   2438  NH1 ARG C3085      -0.581   9.110  28.437  1.00 33.70           N
ATOM   2439  NH2 ARG C3085      -2.770   8.663  28.954  1.00 33.05           N
ATOM   2440  C   ARG C3085       1.021   9.369  21.863  1.00 27.34           C
ATOM   2441  O   ARG C3085       0.310  10.158  21.244  1.00 27.35           O
ATOM   2442  N   GLY C3086       2.237   9.016  21.454  1.00 26.82           N
ATOM   2443  CA  GLY C3086       2.788   9.545  20.218  1.00 25.87           C
ATOM   2444  C   GLY C3086       3.607  10.808  20.384  1.00 25.74           C
ATOM   2445  O   GLY C3086       4.109  11.370  19.401  1.00 25.82           O
ATOM   2446  N   ALA C3087       3.753  11.254  21.626  1.00 24.95           N
ATOM   2447  CA  ALA C3087       4.508  12.461  21.920  1.00 24.57           C
ATOM   2448  CB  ALA C3087       3.933  13.147  23.155  1.00 24.64           C
ATOM   2449  C   ALA C3087       5.991  12.183  22.130  1.00 24.46           C
ATOM   2450  O   ALA C3087       6.372  11.277  22.878  1.00 24.54           O
ATOM   2451  N   PRO C3088       6.851  12.964  21.461  1.00 24.09           N
ATOM   2452  CD  PRO C3088       6.501  14.011  20.482  1.00 23.71           C
ATOM   2453  CA  PRO C3088       8.306  12.815  21.572  1.00 23.76           C
ATOM   2454  CB  PRO C3088       8.825  13.714  20.451  1.00 23.93           C
ATOM   2455  CG  PRO C3088       7.781  14.816  20.403  1.00 23.82           C
ATOM   2456  C   PRO C3088       8.799  13.249  22.952  1.00 23.43           C
ATOM   2457  O   PRO C3088       8.162  14.066  23.610  1.00 23.03           O
ATOM   2458  N   TYR C3089       9.925  12.692  23.391  1.00 23.74           N
ATOM   2459  CA  TYR C3089      10.496  13.028  24.698  1.00 24.43           C
ATOM   2460  CB  TYR C3089       9.671  12.400  25.834  1.00 24.30           C
ATOM   2461  CG  TYR C3089       9.843  10.904  25.973  1.00 24.64           C
ATOM   2462  CD1 TYR C3089      10.832  10.363  26.804  1.00 24.62           C
ATOM   2463  CE1 TYR C3089      11.008   8.978  26.911  1.00 24.92           C
ATOM   2464  CD2 TYR C3089       9.033  10.027  25.256  1.00 24.84           C
ATOM   2465  CE2 TYR C3089       9.199   8.643  25.352  1.00 25.43           C
ATOM   2466  CZ  TYR C3089      10.187   8.125  26.178  1.00 25.32           C
ATOM   2467  OH  TYR C3089      10.353   6.761  26.236  1.00 25.52           O
ATOM   2468  C   TYR C3089      11.925  12.521  24.772  1.00 24.85           C
ATOM   2469  O   TYR C3089      12.279  11.552  24.103  1.00 25.10           O
ATOM   2470  N   PHE C3090      12.750  13.171  25.584  1.00 25.52           N
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ATOM    2471  CA   PHE C3090      14.135  12.742  25.714  1.00 26.19       C
ATOM    2472  CB   PHE C3090      15.038  13.901  26.156  1.00 26.18       C
ATOM    2473  CG   PHE C3090      15.387  14.852  25.051  1.00 26.76       C
ATOM    2474  CD1  PHE C3090      14.541  15.912  24.725  1.00 27.13       C
ATOM    2475  CD2  PHE C3090      16.554  14.675  24.311  1.00 27.22       C
ATOM    2476  CE1  PHE C3090      14.851  16.792  23.675  1.00 27.19       C
ATOM    2477  CE2  PHE C3090      16.882  15.548  23.253  1.00 27.68       C
ATOM    2478  CZ   PHE C3090      16.025  16.608  22.936  1.00 27.50       C
ATOM    2479  C    PHE C3090      14.277  11.595  26.693  1.00 26.31       C
ATOM    2480  O    PHE C3090      14.076  11.767  27.895  1.00 27.02       O
ATOM    2481  N    SER C3091      14.616  10.423  26.169  1.00 26.64       N
ATOM    2482  CA   SER C3091      14.818   9.237  26.994  1.00 27.16       C
ATOM    2483  CB   SER C3091      14.549   7.964  26.185  1.00 26.45       C
ATOM    2484  OG   SER C3091      15.280   7.970  24.974  1.00 27.09       O
ATOM    2485  C    SER C3091      16.256   9.235  27.513  1.00 27.57       C
ATOM    2486  O    SER C3091      16.594   8.485  28.424  1.00 27.76       O
ATOM    2487  N    GLN C3092      17.095  10.086  26.928  1.00 28.18       N
ATOM    2488  CA   GLN C3092      18.490  10.199  27.340  1.00 29.06       C
ATOM    2489  CB   GLN C3092      19.355   9.181  26.595  1.00 30.20       C
ATOM    2490  CG   GLN C3092      20.843   9.363  26.840  1.00 31.72       C
ATOM    2491  CD   GLN C3092      21.280   8.873  28.211  1.00 32.79       C
ATOM    2492  OE1  GLN C3092      21.336   7.667  28.461  1.00 33.66       O
ATOM    2493  NE2  GLN C3092      21.590   9.805  29.105  1.00 33.12       N
ATOM    2494  C    GLN C3092      19.021  11.601  27.069  1.00 28.89       C
ATOM    2495  O    GLN C3092      18.889  12.118  25.954  1.00 29.04       O
ATOM    2496  N    ALA C3093      19.630  12.207  28.088  1.00 28.63       N
ATOM    2497  CA   ALA C3093      20.179  13.556  27.963  1.00 28.35       C
ATOM    2498  CB   ALA C3093      19.040  14.565  27.805  1.00 28.23       C
ATOM    2499  C    ALA C3093      21.047  13.945  29.159  1.00 28.01       C
ATOM    2500  O    ALA C3093      20.721  13.635  30.307  1.00 28.15       O
ATOM    2501  N    PRO C3094      22.167  14.640  28.905  1.00 27.81       N
ATOM    2502  CD   PRO C3094      22.702  15.035  27.590  1.00 27.69       C
ATOM    2503  CA   PRO C3094      23.066  15.067  29.984  1.00 27.41       C
ATOM    2504  CB   PRO C3094      24.271  15.625  29.226  1.00 27.35       C
ATOM    2505  CG   PRO C3094      23.658  16.148  27.960  1.00 27.34       C
ATOM    2506  C    PRO C3094      22.409  16.108  30.883  1.00 27.24       C
ATOM    2507  O    PRO C3094      22.992  17.150  31.172  1.00 27.73       O
ATOM    2508  N    PHE C3095      21.195  15.820  31.330  1.00 26.89       N
ATOM    2509  CA   PHE C3095      20.457  16.740  32.182  1.00 26.88       C
ATOM    2510  CB   PHE C3095      19.603  17.680  31.314  1.00 26.34       C
ATOM    2511  CG   PHE C3095      18.986  18.820  32.081  1.00 25.69       C
ATOM    2512  CD1  PHE C3095      19.789  19.707  32.796  1.00 24.82       C
ATOM    2513  CD2  PHE C3095      17.606  18.973  32.133  1.00 24.80       C
ATOM    2514  CE1  PHE C3095      19.224  20.722  33.556  1.00 24.83       C
ATOM    2515  CE2  PHE C3095      17.031  19.985  32.890  1.00 24.99       C
ATOM    2516  CZ   PHE C3095      17.841  20.862  33.605  1.00 24.98       C
ATOM    2517  C    PHE C3095      19.569  15.927  33.115  1.00 27.25       C
ATOM    2518  O    PHE C3095      18.924  14.983  32.684  1.00 28.50       O
ATOM    2519  N    SER C3096      19.525  16.284  34.390  1.00 27.37       N
ATOM    2520  CA   SER C3096      18.710  15.530  35.332  1.00 27.95       C
ATOM    2521  CB   SER C3096      19.542  15.174  36.565  1.00 28.67       C
ATOM    2522  OG   SER C3096      20.425  16.230  36.883  1.00 30.49       O
ATOM    2523  C    SER C3096      17.403  16.202  35.754  1.00 27.66       C
ATOM    2524  O    SER C3096      16.663  15.665  36.577  1.00 27.25       O
ATOM    2525  N    GLY C3097      17.117  17.372  35.192  1.00 26.91       N
ATOM    2526  CA   GLY C3097      15.874  18.045  35.521  1.00 26.05       C
ATOM    2527  C    GLY C3097      14.839  17.654  34.488  1.00 25.55       C
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ATOM   2528  O   GLY C3097      15.047  16.696  33.745  1.00 25.35           O
ATOM   2529  N   LYS C3098      13.729  18.384  34.428  1.00 25.19           N
ATOM   2530  CA  LYS C3098      12.690  18.086  33.452  1.00 24.30           C
ATOM   2531  CB  LYS C3098      11.320  18.543  33.945  1.00 24.76           C
ATOM   2532  CG  LYS C3098      10.863  17.934  35.237  1.00 25.27           C
ATOM   2533  CD  LYS C3098       9.397  18.241  35.459  1.00 26.28           C
ATOM   2534  CE  LYS C3098       8.973  17.880  36.860  1.00 26.82           C
ATOM   2535  NZ  LYS C3098       9.334  16.468  37.155  1.00 28.61           N
ATOM   2536  C   LYS C3098      12.978  18.774  32.119  1.00 23.93           C
ATOM   2537  O   LYS C3098      13.330  19.954  32.077  1.00 23.38           O
ATOM   2538  N   ILE C3099      12.821  18.019  31.034  1.00 23.34           N
ATOM   2539  CA  ILE C3099      13.033  18.536  29.690  1.00 22.75           C
ATOM   2540  CB  ILE C3099      13.960  17.613  28.874  1.00 22.58           C
ATOM   2541  CG2 ILE C3099      14.345  18.292  27.558  1.00 22.52           C
ATOM   2542  CG1 ILE C3099      15.219  17.291  29.688  1.00 22.55           C
ATOM   2543  CD1 ILE C3099      16.199  16.357  28.985  1.00 22.28           C
ATOM   2544  C   ILE C3099      11.676  18.617  28.990  1.00 22.48           C
ATOM   2545  O   ILE C3099      11.054  17.591  28.699  1.00 22.47           O
ATOM   2546  N   TRP C3100      11.205  19.835  28.743  1.00 21.77           N
ATOM   2547  CA  TRP C3100       9.926  20.008  28.071  1.00 20.54           C
ATOM   2548  CB  TRP C3100       9.180  21.228  28.600  1.00 19.83           C
ATOM   2549  CG  TRP C3100       8.900  21.139  30.066  1.00 19.91           C
ATOM   2550  CD2 TRP C3100       7.806  20.455  30.694  1.00 19.80           C
ATOM   2551  CE2 TRP C3100       7.968  20.605  32.091  1.00 19.84           C
ATOM   2552  CE3 TRP C3100       6.704  19.727  30.211  1.00 19.87           C
ATOM   2553  CD1 TRP C3100       9.660  21.660  31.081  1.00 19.93           C
ATOM   2554  NE1 TRP C3100       9.106  21.343  32.296  1.00 19.91           N
ATOM   2555  CZ2 TRP C3100       7.069  20.058  33.015  1.00 19.27           C
ATOM   2556  CZ3 TRP C3100       5.808  19.181  31.128  1.00 19.78           C
ATOM   2557  CH2 TRP C3100       6.000  19.352  32.520  1.00 20.41           C
ATOM   2558  C   TRP C3100      10.239  20.174  26.611  1.00 20.42           C
ATOM   2559  O   TRP C3100      10.831  21.174  26.195  1.00 21.30           O
ATOM   2560  N   LEU C3101       9.845  19.173  25.838  1.00 19.69           N
ATOM   2561  CA  LEU C3101      10.097  19.143  24.416  1.00 19.35           C
ATOM   2562  CB  LEU C3101      10.903  17.891  24.072  1.00 18.36           C
ATOM   2563  CG  LEU C3101      10.885  17.499  22.592  1.00 18.24           C
ATOM   2564  CD1 LEU C3101      11.677  18.536  21.786  1.00 16.55           C
ATOM   2565  CD2 LEU C3101      11.466  16.097  22.414  1.00 17.56           C
ATOM   2566  C   LEU C3101       8.831  19.145  23.587  1.00 19.41           C
ATOM   2567  O   LEU C3101       7.846  18.493  23.929  1.00 19.45           O
ATOM   2568  N   SER C3102       8.860  19.885  22.490  1.00 19.43           N
ATOM   2569  CA  SER C3102       7.722  19.899  21.596  1.00 19.85           C
ATOM   2570  CB  SER C3102       6.793  21.082  21.873  1.00 19.85           C
ATOM   2571  OG  SER C3102       5.550  20.887  21.212  1.00 19.01           O
ATOM   2572  C   SER C3102       8.269  19.972  20.190  1.00 20.13           C
ATOM   2573  O   SER C3102       9.272  20.637  19.939  1.00 19.67           O
ATOM   2574  N   ILE C3103       7.624  19.251  19.282  1.00 21.04           N
ATOM   2575  CA  ILE C3103       8.037  19.231  17.889  1.00 22.10           C
ATOM   2576  CB  ILE C3103       8.735  17.906  17.523  1.00 21.92           C
ATOM   2577  CG2 ILE C3103       9.127  17.922  16.059  1.00 21.89           C
ATOM   2578  CG1 ILE C3103       9.963  17.681  18.405  1.00 22.24           C
ATOM   2579  CD1 ILE C3103      10.695  16.376  18.094  1.00 22.36           C
ATOM   2580  C   ILE C3103       6.804  19.346  17.010  1.00 23.17           C
ATOM   2581  O   ILE C3103       5.753  18.805  17.338  1.00 23.73           O
ATOM   2582  N   SER C3104       6.932  20.051  15.896  1.00 23.79           N
ATOM   2583  CA  SER C3104       5.829  20.186  14.965  1.00 24.82           C
ATOM   2584  CB  SER C3104       4.989  21.419  15.294  1.00 24.69           C
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ATOM   2585  OG   SER C3104        3.905  21.546  14.390  1.00 24.65          O
ATOM   2586  C    SER C3104        6.423  20.295  13.567  1.00 25.82          C
ATOM   2587  O    SER C3104        7.577  20.690  13.403  1.00 25.83          O
ATOM   2588  N    HIS C3105        5.646  19.929  12.560  1.00 27.14          N
ATOM   2589  CA   HIS C3105        6.140  19.996  11.200  1.00 28.67          C
ATOM   2590  CB   HIS C3105        6.841  18.686  10.819  1.00 30.20          C
ATOM   2591  CG   HIS C3105        5.901  17.542  10.584  1.00 31.48          C
ATOM   2592  CD2  HIS C3105        5.474  16.961   9.437  1.00 32.52          C
ATOM   2593  ND1  HIS C3105        5.252  16.887  11.607  1.00 33.00          N
ATOM   2594  CE1  HIS C3105        4.465  15.952  11.103  1.00 33.08          C
ATOM   2595  NE2  HIS C3105        4.580  15.977   9.787  1.00 33.14          N
ATOM   2596  C    HIS C3105        5.046  20.253  10.187  1.00 29.03          C
ATOM   2597  O    HIS C3105        3.862  20.082  10.468  1.00 28.87          O
ATOM   2598  N    THR C3106        5.478  20.682   9.009  1.00 29.70          N
ATOM   2599  CA   THR C3106        4.609  20.918   7.871  1.00 30.87          C
ATOM   2600  CB   THR C3106        4.542  22.416   7.492  1.00 30.95          C
ATOM   2601  OG1  THR C3106        5.853  22.895   7.185  1.00 31.53          O
ATOM   2602  CG2  THR C3106        3.970  23.231   8.631  1.00 31.66          C
ATOM   2603  C    THR C3106        5.310  20.118   6.758  1.00 31.46          C
ATOM   2604  O    THR C3106        6.288  19.411   7.032  1.00 31.17          O
ATOM   2605  N    ASP C3107        4.834  20.223   5.521  1.00 32.04          N
ATOM   2606  CA   ASP C3107        5.444  19.475   4.423  1.00 32.74          C
ATOM   2607  CB   ASP C3107        4.584  19.570   3.151  1.00 33.89          C
ATOM   2608  CG   ASP C3107        3.252  18.836   3.276  1.00 35.29          C
ATOM   2609  OD1  ASP C3107        3.059  18.077   4.257  1.00 35.09          O
ATOM   2610  OD2  ASP C3107        2.396  19.017   2.379  1.00 35.84          O
ATOM   2611  C    ASP C3107        6.861  19.942   4.096  1.00 32.51          C
ATOM   2612  O    ASP C3107        7.680  19.158   3.609  1.00 32.63          O
ATOM   2613  N    GLN C3108        7.152  21.210   4.371  1.00 31.99          N
ATOM   2614  CA   GLN C3108        8.467  21.768   4.068  1.00 31.59          C
ATOM   2615  CB   GLN C3108        8.310  23.119   3.362  1.00 32.00          C
ATOM   2616  CG   GLN C3108        7.482  23.077   2.086  1.00 32.40          C
ATOM   2617  CD   GLN C3108        7.294  24.452   1.469  0.05 32.28          C
ATOM   2618  OE1  GLN C3108        6.650  24.597   0.430  0.05 32.30          O
ATOM   2619  NE2  GLN C3108        7.856  25.469   2.110  0.05 32.28          N
ATOM   2620  C    GLN C3108        9.391  21.957   5.272  1.00 30.94          C
ATOM   2621  O    GLN C3108       10.610  21.833   5.145  1.00 30.85          O
ATOM   2622  N    PHE C3109        8.822  22.258   6.436  1.00 30.12          N
ATOM   2623  CA   PHE C3109        9.648  22.489   7.610  1.00 29.07          C
ATOM   2624  CB   PHE C3109        9.652  23.980   7.953  1.00 29.62          C
ATOM   2625  CG   PHE C3109       10.111  24.857   6.827  1.00 30.64          C
ATOM   2626  CD1  PHE C3109        9.215  25.275   5.845  1.00 31.09          C
ATOM   2627  CD2  PHE C3109       11.440  25.259   6.738  1.00 30.59          C
ATOM   2628  CE1  PHE C3109        9.636  26.084   4.788  1.00 31.21          C
ATOM   2629  CE2  PHE C3109       11.870  26.066   5.688  1.00 30.89          C
ATOM   2630  CZ   PHE C3109       10.964  26.480   4.709  1.00 31.08          C
ATOM   2631  C    PHE C3109        9.292  21.716   8.860  1.00 28.01          C
ATOM   2632  O    PHE C3109        8.252  21.065   8.936  1.00 28.14          O
ATOM   2633  N    VAL C3110       10.192  21.798   9.838  1.00 26.84          N
ATOM   2634  CA   VAL C3110       10.019  21.175  11.140  1.00 25.60          C
ATOM   2635  CB   VAL C3110       10.766  19.822  11.250  1.00 25.63          C
ATOM   2636  CG1  VAL C3110       12.268  20.035  11.191  1.00 25.54          C
ATOM   2637  CG2  VAL C3110       10.387  19.133  12.554  1.00 25.58          C
ATOM   2638  C    VAL C3110       10.580  22.139  12.187  1.00 24.84          C
ATOM   2639  O    VAL C3110       11.596  22.798  11.957  1.00 24.75          O
ATOM   2640  N    THR C3111        9.911  22.239  13.328  1.00 23.62          N
ATOM   2641  CA   THR C3111       10.377  23.120  14.395  1.00 23.00          C
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ATOM    2642  CB  THR C3111       9.451   24.332  14.583  1.00 23.10           C
ATOM    2643  OG1 THR C3111       8.138   23.871  14.924  1.00 24.21           O
ATOM    2644  CG2 THR C3111       9.369   25.145  13.306  1.00 23.43           C
ATOM    2645  C   THR C3111      10.424   22.363  15.712  1.00 22.01           C
ATOM    2646  O   THR C3111       9.616   21.466  15.951  1.00 22.10           O
ATOM    2647  N   ALA C3112      11.382   22.726  16.554  1.00 21.05           N
ATOM    2648  CA  ALA C3112      11.532   22.110  17.859  1.00 20.79           C
ATOM    2649  CB  ALA C3112      12.710   21.135  17.846  1.00 20.00           C
ATOM    2650  C   ALA C3112      11.741   23.194  18.927  1.00 20.81           C
ATOM    2651  O   ALA C3112      12.367   24.216  18.672  1.00 20.76           O
ATOM    2652  N   SER C3113      11.199   22.968  20.118  1.00 20.90           N
ATOM    2653  CA  SER C3113      11.346   23.909  21.215  1.00 20.61           C
ATOM    2654  CB  SER C3113      10.061   24.721  21.413  1.00 20.72           C
ATOM    2655  OG  SER C3113      10.176   25.598  22.526  1.00 20.34           O
ATOM    2656  C   SER C3113      11.653   23.128  22.477  1.00 20.63           C
ATOM    2657  O   SER C3113      11.013   22.119  22.759  1.00 20.86           O
ATOM    2658  N   VAL C3114      12.633   23.599  23.237  1.00 20.54           N
ATOM    2659  CA  VAL C3114      13.019   22.938  24.463  1.00 20.40           C
ATOM    2660  CB  VAL C3114      14.349   22.188  24.288  1.00 20.41           C
ATOM    2661  CG1 VAL C3114      14.872   21.743  25.647  1.00 19.44           C
ATOM    2662  CG2 VAL C3114      14.143   20.976  23.357  1.00 20.11           C
ATOM    2663  C   VAL C3114      13.159   23.883  25.644  1.00 20.99           C
ATOM    2664  O   VAL C3114      13.804   24.938  25.552  1.00 20.99           O
ATOM    2665  N   ILE C3115      12.543   23.494  26.756  1.00 21.35           N
ATOM    2666  CA  ILE C3115      12.626   24.269  27.980  1.00 22.44           C
ATOM    2667  CB  ILE C3115      11.250   24.816  28.428  1.00 22.27           C
ATOM    2668  CG2 ILE C3115      11.440   25.821  29.562  1.00 22.27           C
ATOM    2669  CG1 ILE C3115      10.553   25.529  27.262  1.00 22.90           C
ATOM    2670  CD1 ILE C3115       9.141   25.990  27.582  1.00 22.49           C
ATOM    2671  C   ILE C3115      13.167   23.360  29.077  1.00 23.09           C
ATOM    2672  O   ILE C3115      12.570   22.331  29.388  1.00 23.11           O
ATOM    2673  N   LEU C3116      14.311   23.730  29.640  1.00 23.90           N
ATOM    2674  CA  LEU C3116      14.912   22.959  30.720  1.00 25.63           C
ATOM    2675  CB  LEU C3116      16.434   23.051  30.667  1.00 24.96           C
ATOM    2676  CG  LEU C3116      17.007   22.497  29.366  1.00 24.50           C
ATOM    2677  CD1 LEU C3116      18.508   22.663  29.350  1.00 23.62           C
ATOM    2678  CD2 LEU C3116      16.596   21.029  29.236  1.00 24.58           C
ATOM    2679  C   LEU C3116      14.418   23.524  32.036  1.00 27.20           C
ATOM    2680  O   LEU C3116      14.412   24.743  32.236  1.00 27.34           O
ATOM    2681  N   GLU C3117      13.998   22.636  32.930  1.00 28.70           N
ATOM    2682  CA  GLU C3117      13.490   23.061  34.226  1.00 30.61           C
ATOM    2683  CB  GLU C3117      11.957   22.951  34.249  1.00 30.11           C
ATOM    2684  CG  GLU C3117      11.322   23.257  35.592  1.00 30.29           C
ATOM    2685  CD  GLU C3117       9.808   23.100  35.585  1.00 30.63           C
ATOM    2686  OE1 GLU C3117       9.313   22.085  35.043  1.00 30.65           O
ATOM    2687  OE2 GLU C3117       9.114   23.985  36.133  1.00 30.59           O
ATOM    2688  C   GLU C3117      14.089   22.241  35.357  1.00 31.98           C
ATOM    2689  O   GLU C3117      14.353   21.052  35.205  1.00 32.46           O
ATOM    2690  N   GLU C3118      14.321   22.900  36.485  1.00 33.79           N
ATOM    2691  CA  GLU C3118      14.863   22.257  37.674  1.00 35.41           C
ATOM    2692  CB  GLU C3118      16.264   22.779  37.990  1.00 36.58           C
ATOM    2693  CG  GLU C3118      17.396   21.983  37.366  1.00 38.74           C
ATOM    2694  CD  GLU C3118      17.335   20.507  37.733  1.00 40.59           C
ATOM    2695  OE1 GLU C3118      16.936   20.189  38.881  1.00 41.34           O
ATOM    2696  OE2 GLU C3118      17.700   19.669  36.877  1.00 41.36           O
ATOM    2697  C   GLU C3118      13.940   22.578  38.837  1.00 36.11           C
ATOM    2698  O   GLU C3118      13.351   21.632  39.403  1.00 37.15           O
ATOM   2699  OXT GLU C3118     13.813  23.778  39.156  1.00 36.00           O
TER    2700      GLU C3118
ATOM   2701  O   HOH W   1      8.576  28.003  19.046  1.00 26.06           O
ATOM   2702  O   HOH W   2     11.001  13.668  14.737  1.00 16.99           O
ATOM   2703  O   HOH W   3     -5.347  33.382  14.724  1.00 27.55           O
ATOM   2704  O   HOH W   4     19.615  31.388  19.825  1.00 18.58           O
ATOM   2705  O   HOH W   5    -11.216  36.113  18.617  1.00 38.18           O
ATOM   2706  O   HOH W   6      0.159  37.746  18.293  1.00 26.61           O
ATOM   2707  O   HOH W   7      1.276  36.190  20.543  1.00 28.54           O
ATOM   2708  O   HOH W   8     12.334  34.067   2.484  1.00 24.27           O
ATOM   2709  O   HOH W   9      0.255   6.277  33.704  1.00 25.24           O
ATOM   2710  O   HOH W  10     18.182  37.167  27.027  1.00 23.05           O
ATOM   2711  O   HOH W  11     -4.577  31.410  31.511  1.00 38.36           O
ATOM   2712  O   HOH W  12     -1.511  45.557  32.920  1.00 53.67           O
ATOM   2713  O   HOH W  13     18.448  25.653  12.095  1.00 26.48           O
ATOM   2714  O   HOH W  14      3.912   2.648  29.570  1.00 20.27           O
ATOM   2715  O   HOH W  15    -11.595  44.974  29.760  1.00 29.90           O
ATOM   2716  O   HOH W  16     25.183  18.367  31.463  1.00 31.92           O
ATOM   2717  O   HOH W  17      1.272  28.443   2.735  1.00 24.74           O
ATOM   2718  O   HOH W  18     19.674  51.864   7.542  1.00 32.28           O
ATOM   2719  O   HOH W  19      7.406  44.679   0.671  1.00 37.76           O
ATOM   2720  O   HOH W  20      9.102  25.639  41.587  1.00 37.75           O
ATOM   2721  O   HOH W  21     -2.117  42.358  29.367  1.00 23.51           O
ATOM   2722  O   HOH W  22     12.144  15.091  31.453  1.00 40.21           O
ATOM   2723  O   HOH W  23     20.216  37.895  14.318  1.00 23.27           O
ATOM   2724  O   HOH W  24     15.409  30.644  36.448  1.00 34.67           O
ATOM   2725  O   HOH W  25      8.888  28.186  21.855  1.00 19.15           O
ATOM   2726  O   HOH W  26     -6.604  42.281  29.309  1.00 52.83           O
ATOM   2727  O   HOH W  27     20.104  53.238  15.360  1.00 42.16           O
ATOM   2728  O   HOH W  28     24.519  36.311  10.567  1.00 45.76           O
ATOM   2729  O   HOH W  29     17.712  23.831   7.356  1.00 49.27           O
ATOM   2730  O   HOH W  30     -6.885  28.651  32.939  1.00 45.10           O
ATOM   2731  O   HOH W  31     -4.869  16.926  12.390  1.00 39.22           O
ATOM   2732  O   HOH W  32     20.935  28.085  34.073  1.00 42.57           O
ATOM   2733  O   HOH W  33     21.868  15.456  38.834  1.00 28.55           O
ATOM   2734  O   HOH W  34     30.171  27.602  20.593  1.00 34.40           O
ATOM   2735  O   HOH W  35     20.651  33.038   6.426  1.00 38.43           O
ATOM   2736  O   HOH W  36     10.238  19.208   1.078  1.00 45.56           O
ATOM   2737  O   HOH W  37     13.283  54.499  28.613  1.00 29.72           O
ATOM   2738  O   HOH W  38    -11.211  32.999   2.256  1.00 31.79           O
ATOM   2739  O   HOH W  39      9.887  29.798  36.670  1.00 39.85           O
ATOM   2740  O   HOH W  40     18.546  10.765  31.009  1.00 38.20           O
ATOM   2741  O   HOH W  41     24.510  24.190  30.902  1.00 36.49           O
ATOM   2742  O   HOH W  42     30.384  38.300  20.406  1.00 44.88           O
ATOM   2743  O   HOH W  43     18.885  28.685  22.975  1.00 28.61           O
ATOM   2744  O   HOH W  44      2.917  33.308  36.961  1.00 38.63           O
ATOM   2745  O   HOH W  45     20.025  37.807  29.500  1.00 35.61           O
ATOM   2746  O   HOH W  46      8.253  16.151  27.102  1.00 45.55           O
ATOM   2747  O   HOH W  47      7.572  21.032  36.495  1.00 16.73           O
ATOM   2748  O   HOH W  48     19.451  28.611  27.413  1.00 35.89           O
ATOM   2749  O   HOH W  49     11.476   8.815  36.574  1.00 25.09           O
ATOM   2750  O   HOH W  50     14.236  27.513   3.754  1.00 34.47           O
ATOM   2751  O   HOH W  51      5.103   9.140  28.941  1.00 41.40           O
ATOM   2752  O   HOH W  52     34.054  32.834  25.976  1.00 45.36           O
ATOM   2753  O   HOH W  53     12.068  21.222   2.790  1.00 39.74           O
ATOM   2754  O   HOH W  54      2.919  30.077  39.125  1.00 41.17           O
ATOM   2755  O   HOH W  55     27.605  12.175  17.892  1.00 50.62           O
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ATOM   2756  O   HOH W  56     -12.868  26.916  30.495  1.00 43.36           O
ATOM   2757  O   HOH W  57       9.027  13.611  36.816  1.00 43.33           O
ATOM   2758  O   HOH W  58       7.507  37.992   7.686  1.00 29.16           O
ATOM   2759  O   HOH W  59      18.024  26.076   4.943  1.00 45.92           O
ATOM   2760  O   HOH W  60      21.889  53.044  19.501  1.00 41.90           O
ATOM   2761  O   HOH W  61      34.566  32.372  30.692  1.00 50.00           O
ATOM   2762  O   HOH W  62       5.289  23.268   4.539  1.00 26.10           O
ATOM   2763  O   HOH W  63      21.724  28.905  29.036  1.00 54.44           O
ATOM   2764  O   HOH W  64       7.000  28.471  37.399  1.00 36.37           O
ATOM   2765  O   HOH W  65      31.382  30.725  21.632  1.00 32.29           O
ATOM   2766  O   HOH W  66      28.182  46.827   4.332  1.00 48.39           O
ATOM   2767  O   HOH W  67       7.410   9.794  14.247  1.00 49.84           O
ATOM   2768  O   HOH W  68      31.517  25.424  22.117  1.00 43.26           O
ATOM   2769  O   HOH W  69      -5.301  33.373  34.239  1.00 34.98           O
ATOM   2770  O   HOH W  70      36.871  33.074  30.281  1.00 41.21           O
ATOM   2771  O   HOH W  71      24.903  41.702  17.966  1.00 33.98           O
ATOM   2772  O   HOH W  72      17.963  38.386  31.211  1.00 35.46           O
ATOM   2773  O   HOH W  73      20.723  48.845   4.797  1.00 50.12           O
ATOM   2774  O   HOH W  74      -8.379  30.159  31.227  1.00 58.73           O
ATOM   2775  O   HOH W  75      -1.343  19.609  10.013  1.00 53.09           O
ATOM   2776  O   HOH W  76      15.642  12.801  31.165  1.00 65.31           O
ATOM   2777  O   HOH W  77     -14.605  25.461   6.171  1.00 36.87           O
ATOM   2778  O   HOH W  78       8.718  39.594   0.632  1.00 44.46           O
ATOM   2779  O   HOH W  79      22.426  26.766  11.895  1.00 39.57           O
ATOM   2780  O   HOH W  80       1.403  12.128  29.940  1.00 41.04           O
ATOM   2781  O   HOH W  81       9.724  26.576  37.441  1.00 52.28           O
ATOM   2782  O   HOH W  82     -20.852  35.093  18.162  1.00 32.23           O
ATOM   2783  O   HOH W  83     -22.727  33.513  17.160  1.00 46.00           O
ATOM   2784  O   HOH W  84      -9.764  38.910   4.301  1.00 38.92           O
ATOM   2785  O   HOH W  85       4.067  40.345  32.364  1.00 54.10           O
ATOM   2786  O   HOH W  86       8.783  44.044   3.423  1.00 45.06           O
ATOM   2787  O   HOH W  87      19.259  34.587  26.113  1.00 34.60           O
ATOM   2788  O   HOH W  88      19.168  34.051  31.232  1.00 40.61           O
ATOM   2789  O   HOH W  89     -17.637  26.480   8.650  1.00 35.76           O
ATOM   2790  O   HOH W  90       5.883  33.114   4.115  1.00 36.72           O
ATOM   2791  O   HOH W  91       5.401   9.271   3.439  1.00 23.12           O
ATOM   2792  O   HOH W  92      16.578  55.625   9.782  1.00 34.03           O
ATOM   2793  O   HOH W  93      -6.649  22.603  36.177  1.00 49.27           O
ATOM   2794  O   HOH W  94      12.263  32.477  39.013  1.00 44.31           O
ATOM   2795  O   HOH W  95      11.064  51.183  10.359  1.00 46.81           O
ATOM   2796  O   HOH W  96     -16.103  28.570   5.999  1.00 45.48           O
ATOM   2797  O   HOH W  97      19.096  56.580   8.669  1.00 48.52           O
ATOM   2798  O   HOH W  98      -0.441  38.083  25.842  1.00 30.49           O
ATOM   2799  O   HOH W  99      18.821  50.159  23.847  1.00 35.93           O
ATOM   2800  O   HOH W 100      21.593  29.439  22.517  1.00 46.08           O
ATOM   2801  O   HOH W 101      24.154  31.033  26.613  1.00 41.03           O
ATOM   2802  O   HOH W 102      18.634  43.303  30.404  1.00 40.85           O
ATOM   2803  O   HOH W 103      19.981  32.247  35.107  1.00 36.43           O
ATOM   2804  O   HOH W 104     -10.088  29.062   1.003  1.00 36.43           O
ATOM   2805  O   HOH W 105     -18.529  19.631   5.334  1.00 38.77           O
ATOM   2806  O   HOH W 106     -20.984  28.385  15.095  1.00 40.22           O
ATOM   2807  O   HOH W 107     -19.013  26.762  15.815  1.00 32.06           O
ATOM   2808  O   HOH W 108     -14.266  19.001  19.100  1.00 41.92           O
ATOM   2809  O   HOH W 109       7.301  10.694  11.123  1.00 37.73           O
ATOM   2810  O   HOH W 110      24.398  18.549  24.386  1.00 37.13           O
ATOM   2811  O   HOH W 111       2.259  41.877  17.603  1.00 33.35           O
ATOM   2812  O   HOH W 112      22.143  19.952   8.110  1.00 46.84           O
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ATOM   2813  O   HOH W 113      -4.490  20.867   8.897  1.00 50.63           O
ATOM   2814  O   HOH W 114       0.274   4.462  29.620  1.00 46.55           O
ATOM   2815  O   HOH W 115       9.966   5.205  19.879  1.00 29.38           O
ATOM   2816  O   HOH W 116      11.609  14.420  39.214  1.00 45.17           O
ATOM   2817  O   HOH W 117      21.720  11.206  36.139  1.00 23.23           O
ATOM   2818  O   HOH W 118      21.825  46.932   3.417  1.00 42.90           O
ATOM   2819  O   HOH W 119       0.067  30.700   1.199  1.00 54.52           O
ATOM   2820  O   HOH W 120      10.218  22.583  38.806  1.00 43.46           O
ATOM   2821  O   HOH W 121       0.686  27.966  42.608  1.00 42.57           O
ATOM   2822  O   HOH W 122      23.786  35.976  16.687  1.00 27.98           O
ATOM   2823  O   HOH W 123      25.685  36.926  14.983  1.00 35.19           O
ATOM   2824  O   HOH W 124       5.593  17.615  20.205  1.00 22.22           O
ATOM   2825  O   HOH W 125      -3.621  36.444  16.059  1.00 38.53           O
ATOM   2826  O   HOH W 126      -6.822  38.370  14.785  1.00 35.77           O
ATOM   2827  O   HOH W 127       8.658  28.063  15.129  1.00 32.14           O
ATOM   2828  O   HOH W 128      -4.302  30.987  36.514  1.00 38.06           O
ATOM   2829  O   HOH W 129      -1.650  29.068  38.757  1.00 30.65           O
TER    2830      HOH W 129
END
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TABLE 4

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REMARK coordinates from restrained individual B-factor refinement
REMARK refinement resolution: 500.0 - 2.05 A
REMARK starting r= 0.2078 free_r= 0.2459
REMARK final    r= 0.2076 free_r= 0.2466
REMARK B rmsd for bonded mainchain atoms=  1.338  target= 1.5
REMARK B rmsd for bonded sidechain atoms=  2.017  target= 2.0
REMARK B rmsd for angle mainchain atoms=  2.137  target= 2.0
REMARK B rmsd for angle sidechain atoms=  3.077  target= 2.5
REMARK wa= 1.98578
REMARK rweight=0.12477
REMARK target= mlf  steps= 30
REMARK sg= C2 a= 116.043 b= 59.291 c= 49.629 alpha= 90 beta= 98.768 gamma= 90
REMARK parameter file 1  : CNX_TOPPAR:protein_rep.param
REMARK parameter file 2  : CNX_TOPPAR:water_rep.param
REMARK parameter file 3  : CNX_TOPPAR:ion.param
REMARK molecular structure file: generate.psf
REMARK input coordinates: minimize.pdb
REMARK reflection file= ../data/x-ray_data.cv
REMARK ncs= none
REMARK B-correction resolution: 6.0 - 2.05
REMARK initial B-factor correction applied to fobs :
REMARK   B11=   0.091 B22=  -2.051 B33=   1.959
REMARK   B12=   0.000 B13=   0.271 B23=   0.000
REMARK B-factor correction applied to coordinate array B:   -0.022
REMARK bulk solvent: (Mask) density level= 0.368883 e/A^3, B-factor= 52.2583 A^2
REMARK reflections with |Fobs|/sigma_F < 0.0 rejected
REMARK reflections with |Fobs| > 10000 * rms(Fobs) rejected
REMARK theoretical total number of refl. in resol. range:      21048 ( 100.0 % )
REMARK number of unobserved reflections (no entry or |F|=0):    1611 (   7.7 % )
REMARK number of reflections rejected:                             0 (   0.0 % )
REMARK total number of reflections used:                       19437 (  92.3 % )
REMARK number of reflections in working set:                   18494 (  87.9 % )
REMARK number of reflections in test set:                        943 (   4.5 % )
REMARK FILENAME="acps_native 2.pdb"
                                    created by user: rx83663
REMARK Written by CNX VERSION:2000
ATOM      1  CB  MET A1003      36.109   5.413  19.351  1.00 32.48           C
ATOM      2  CG  MET A1003      35.473   5.856  20.649  1.00 37.79           C
ATOM      3  SD  MET A1003      36.607   6.848  21.649  1.00 45.89           S
ATOM      4  CE  MET A1003      36.791   8.314  20.599  1.00 43.10           C
ATOM      5  C   MET A1003      33.900   5.073  18.225  1.00 27.65           C
ATOM      6  O   MET A1003      33.795   6.027  17.463  1.00 25.93           O
ATOM      7  N   MET A1003      35.971   4.133  17.240  1.00 28.87           N
ATOM      8  CA  MET A1003      35.262   4.452  18.515  1.00 29.37           C
ATOM      9  N   ILE A1004      32.860   4.513  18.832  1.00 27.12           N
ATOM     10  CA  ILE A1004      31.500   5.005  18.649  1.00 25.95           C
ATOM     11  CB  ILE A1004      30.463   3.928  19.020  1.00 25.43           C
ATOM     12  CG2 ILE A1004      29.048   4.516  18.954  1.00 24.89           C
ATOM     13  CG1 ILE A1004      30.604   2.730  18.076  1.00 24.55           C
ATOM     14  CD1 ILE A1004      29.619   1.616  18.347  1.00 26.14           C
ATOM     15  C   ILE A1004      31.289   6.214  19.546  1.00 27.18           C
ATOM     16  O   ILE A1004      31.700   6.212  20.703  1.00 27.39           O
ATOM     17  N   VAL A1005      30.655   7.251  19.018  1.00 24.87           N
ATOM     18  CA  VAL A1005      30.420   8.439  19.818  1.00 25.40           C
ATOM     19  CB  VAL A1005      31.326   9.589  19.346  1.00 26.42           C
ATOM     20  CG1 VAL A1005      32.781   9.240  19.648  1.00 26.20           C
ATOM     21  CG2 VAL A1005      31.153   9.818  17.860  1.00 27.65           C
ATOM     22  C   VAL A1005      28.955   8.857  19.794  1.00 24.30           C
ATOM     23  O   VAL A1005      28.592   9.964  20.195  1.00 23.88           O
ATOM     24  N   GLY A1006      28.102   7.952  19.331  1.00 23.00           N
ATOM     25  CA  GLY A1006      26.687   8.261  19.290  1.00 19.45           C
ATOM     26  C   GLY A1006      25.887   7.300  18.443  1.00 18.59           C
ATOM     27  O   GLY A1006      26.396   6.730  17.480  1.00 16.47           O
ATOM     28  N   HIS A1007      24.621   7.130  18.809  1.00 16.39           N
ATOM     29  CA  HIS A1007      23.720   6.249  18.092  1.00 15.38           C
ATOM     30  CB  HIS A1007      23.825   4.818  18.636  1.00 17.15           C
ATOM     31  CG  HIS A1007      22.877   3.853  17.993  1.00 18.41           C
ATOM     32  CD2 HIS A1007      22.075   2.902  18.528  1.00 17.85           C
ATOM     33  ND1 HIS A1007      22.690   3.789  16.628  1.00 17.93           N
ATOM     34  CE1 HIS A1007      21.811   2.841  16.351  1.00 19.72           C
ATOM     35  NE2 HIS A1007      21.423   2.288  17.486  1.00 18.78           N
ATOM     36  C   HIS A1007      22.302   6.768  18.262  1.00 16.54           C
ATOM     37  O   HIS A1007      21.883   7.113  19.364  1.00 15.23           O
ATOM     38  N   GLY A1008      21.568   6.844  17.162  1.00 13.65           N
ATOM     39  CA  GLY A1008      20.204   7.303  17.250  1.00 14.59           C
ATOM     40  C   GLY A1008      19.364   6.591  16.220  1.00 16.81           C
ATOM     41  O   GLY A1008      19.864   6.208  15.154  1.00 14.95           O
ATOM     42  N   ILE A1009      18.089   6.394  16.538  1.00 16.05           N
ATOM     43  CA  ILE A1009      17.186   5.750  15.603  1.00 16.53           C
ATOM     44  CB  ILE A1009      16.841   4.297  16.012  1.00 16.37           C
ATOM     45  CG2 ILE A1009      18.087   3.436  15.974  1.00 15.97           C
ATOM     46  CG1 ILE A1009      16.168   4.284  17.393  1.00 14.54           C
ATOM     47  CD1 ILE A1009      15.697   2.907  17.831  1.00 15.26           C
ATOM     48  C   ILE A1009      15.898   6.541  15.578  1.00 18.21           C
ATOM     49  O   ILE A1009      15.681   7.423  16.408  1.00 18.91           O
ATOM     50  N   ASP A1010      15.041   6.218  14.623  1.00 19.48           N
ATOM     51  CA  ASP A1010      13.759   6.880  14.520  1.00 20.47           C
ATOM     52  CB  ASP A1010      13.930   8.295  13.969  1.00 21.20           C
ATOM     53  CG  ASP A1010      12.614   9.013  13.813  1.00 24.68           C
ATOM     54  OD1 ASP A1010      12.002   8.901  12.725  1.00 25.58           O
ATOM     55  OD2 ASP A1010      12.182   9.675  14.785  1.00 21.51           O
ATOM     56  C   ASP A1010      12.822   6.094  13.630  1.00 22.13           C
ATOM     57  O   ASP A1010      13.249   5.485  12.641  1.00 21.63           O
ATOM     58  N   ILE A1011      11.548   6.074  14.011  1.00 20.69           N
ATOM     59  CA  ILE A1011      10.525   5.403  13.226  1.00 22.73           C
ATOM     60  CB  ILE A1011      10.019   4.103  13.903  1.00 22.88           C
ATOM     61  CG2 ILE A1011       9.505   4.398  15.320  1.00 23.25           C
ATOM     62  CG1 ILE A1011       8.922   3.476  13.033  1.00 24.40           C
ATOM     63  CD1 ILE A1011       8.496   2.096  13.466  1.00 25.25           C
ATOM     64  C   ILE A1011       9.394   6.412  13.094  1.00 23.63           C
ATOM     65  O   ILE A1011       9.016   7.061  14.071  1.00 23.36           O
ATOM     66  N   GLU A1012       8.869   6.549  11.882  1.00 25.11           N
ATOM     67  CA  GLU A1012       7.810   7.514  11.602  1.00 24.91           C
ATOM     68  CB  GLU A1012       8.421   8.737  10.916  1.00 25.40           C
ATOM     69  CG  GLU A1012       7.413   9.773  10.433  1.00 29.98           C
ATOM     70  CD  GLU A1012       6.857  10.631  11.552  1.00 32.43           C
ATOM     71  OE1 GLU A1012       5.954  11.447  11.274  1.00 36.73           O
ATOM     72  OE2 GLU A1012       7.319  10.497  12.704  1.00 35.01           O
ATOM     73  C   GLU A1012       6.705   6.952  10.716  1.00 24.25           C
ATOM     74  O   GLU A1012       6.975   6.186   9.789  1.00 22.71           O
ATOM     75  N   GLU A1013       5.462   7.331  11.006  1.00 24.75           N
ATOM     76  CA  GLU A1013       4.326   6.895  10.195  1.00 25.26           C
ATOM     77  CB  GLU A1013       3.006   7.010  10.956  1.00 27.28           C
ATOM     78  CG  GLU A1013       2.782   6.015  12.056  1.00 32.89           C
ATOM     79  CD  GLU A1013       1.337   6.025  12.512  1.00 36.18           C
ATOM     80  OE1 GLU A1013       0.451   5.792  11.661  1.00 38.66           O
ATOM     81  OE2 GLU A1013       1.083   6.270  13.709  1.00 39.09           O
ATOM     82  C   GLU A1013       4.253   7.848   9.013  1.00 24.28           C
ATOM     83  O   GLU A1013       4.254   9.062   9.197  1.00 24.07           O
ATOM     84  N   LEU A1014       4.179   7.308   7.805  1.00 23.86           N
ATOM     85  CA  LEU A1014       4.103   8.149   6.615  1.00 24.45           C
ATOM     86  CB  LEU A1014       4.150   7.274   5.362  1.00 25.54           C
ATOM     87  CG  LEU A1014       5.402   6.397   5.287  1.00 28.12           C
ATOM     88  CD1 LEU A1014       5.266   5.386   4.162  1.00 28.37           C
ATOM     89  CD2 LEU A1014       6.627   7.284   5.082  1.00 29.49           C
ATOM     90  C   LEU A1014       2.838   9.010   6.611  1.00 23.06           C
ATOM     91  O   LEU A1014       2.838  10.126   6.083  1.00 22.31           O
ATOM     92  N   ALA A1015       1.768   8.490   7.210  1.00 22.30           N
ATOM     93  CA  ALA A1015       0.489   9.202   7.284  1.00 21.59           C
ATOM     94  CB  ALA A1015      -0.529   8.372   8.068  1.00 20.65           C
ATOM     95  C   ALA A1015       0.664  10.568   7.938  1.00 21.21           C
ATOM     96  O   ALA A1015       0.101  11.562   7.483  1.00 19.58           O
ATOM     97  N   SER A1016       1.442  10.605   9.017  1.00 21.38           N
ATOM     98  CA  SER A1016       1.711  11.848   9.728  1.00 22.18           C
ATOM     99  CB  SER A1016       2.587  11.569  10.951  1.00 22.67           C
ATOM    100  OG  SER A1016       2.034  10.523  11.733  1.00 29.64           O
ATOM    101  C   SER A1016       2.428  12.825   8.800  1.00 22.03           C
ATOM    102  O   SER A1016       2.134  14.020   8.786  1.00 24.58           O
ATOM    103  N   ILE A1017       3.382  12.319   8.027  1.00 21.56           N
ATOM    104  CA  ILE A1017       4.112  13.177   7.104  1.00 22.10           C
ATOM    105  CB  ILE A1017       5.336  12.454   6.523  1.00 22.24           C
ATOM    106  CG2 ILE A1017       5.975  13.312   5.432  1.00 21.89           C
ATOM    107  CG1 ILE A1017       6.342  12.174   7.641  1.00 22.58           C
ATOM    108  CD1 ILE A1017       6.904  13.440   8.287  1.00 24.27           C
ATOM    109  C   ILE A1017       3.207  13.633   5.957  1.00 22.93           C
ATOM    110  O   ILE A1017       3.244  14.793   5.549  1.00 23.54           O
ATOM    111  N   GLU A1018       2.388  12.726   5.440  1.00 23.95           N
ATOM    112  CA  GLU A1018       1.494  13.096   4.348  1.00 26.57           C
ATOM    113  CB  GLU A1018       0.794  11.862   3.775  1.00 29.38           C
ATOM    114  CG  GLU A1018      -0.244  12.197   2.709  1.00 33.05           C
ATOM    115  CD  GLU A1018      -0.655  10.987   1.900  1.00 36.21           C
ATOM    116  OE1 GLU A1018      -0.803   9.897   2.495  1.00 38.49           O
ATOM    117  OE2 GLU A1018      -0.840  11.131   0.672  1.00 38.02           O
ATOM    118  C   GLU A1018       0.466  14.116   4.819  1.00 25.75           C
ATOM    119  O   GLU A1018       0.115  15.032   4.082  1.00 25.64           O
ATOM    120  N   SER A1019      -0.011  13.960   6.052  1.00 27.25           N
ATOM    121  CA  SER A1019      -0.980  14.893   6.615  1.00 27.84           C
ATOM    122  CB  SER A1019      -1.436  14.425   8.000  1.00 28.92           C
ATOM    123  OG  SER A1019      -2.107  13.176   7.929  1.00 31.15           O
ATOM    124  C   SER A1019      -0.338  16.275   6.734  1.00 28.62           C
ATOM    125  O   SER A1019      -0.956  17.289   6.400  1.00 27.65           O
ATOM    126  N   ALA A1020       0.907  16.302   7.209  1.00 28.27           N
ATOM    127  CA  ALA A1020       1.650  17.545   7.374  1.00 30.56           C
ATOM    128  CB  ALA A1020       3.020  17.267   8.005  1.00 30.65           C
ATOM    129  C   ALA A1020       1.823  18.267   6.045  1.00 31.87           C
ATOM    130  O   ALA A1020       1.686  19.487   5.976  1.00 32.82           O
ATOM    131  N   VAL A1021       2.127  17.513   4.992  1.00 33.76           N
ATOM    132  CA  VAL A1021       2.304  18.099   3.666  1.00 34.05           C
ATOM    133  CB  VAL A1021       2.830  17.057   2.656  1.00 34.30           C
ATOM    134  CG1 VAL A1021       2.878  17.660   1.263  1.00 31.58           C
ATOM    135  CG2 VAL A1021       4.213  16.577   3.073  1.00 33.12           C
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ATOM    136  C   VAL A1021       0.969  18.635   3.150  1.00 35.65           C
ATOM    137  O   VAL A1021       0.891  19.754   2.643  1.00 34.17           O
ATOM    138  N   THR A1022      -0.081  17.829   3.294  1.00 36.17           N
ATOM    139  CA  THR A1022      -1.418  18.209   2.842  1.00 37.29           C
ATOM    140  CB  THR A1022      -2.433  17.074   3.096  1.00 35.53           C
ATOM    141  OG1 THR A1022      -2.107  15.955   2.265  1.00 34.37           O
ATOM    142  CG2 THR A1022      -3.845  17.530   2.776  1.00 35.58           C
ATOM    143  C   THR A1022      -1.933  19.482   3.504  1.00 39.32           C
ATOM    144  O   THR A1022      -2.672  20.250   2.885  1.00 38.90           O
ATOM    145  N   ARG A1023      -1.544  19.702   4.758  1.00 42.46           N
ATOM    146  CA  ARG A1023      -1.977  20.885   5.496  1.00 46.07           C
ATOM    147  CB  ARG A1023      -1.684  20.727   6.991  1.00 48.22           C
ATOM    148  CG  ARG A1023      -2.327  19.534   7.664  1.00 51.97           C
ATOM    149  CD  ARG A1023      -1.900  19.477   9.125  1.00 55.95           C
ATOM    150  NE  ARG A1023      -2.234  18.208   9.770  1.00 59.02           N
ATOM    151  CZ  ARG A1023      -1.958  17.922  11.039  1.00 61.01           C
ATOM    152  NH1 ARG A1023      -1.344  18.818  11.804  1.00 61.80           N
ATOM    153  NH2 ARG A1023      -2.292  16.741  11.546  1.00 61.79           N
ATOM    154  C   ARG A1023      -1.275  22.147   4.999  1.00 47.81           C
ATOM    155  O   ARG A1023      -1.801  22.888   4.166  1.00 47.51           O
ATOM    156  N   HIS A1024      -0.077  22.381   5.526  1.00 49.48           N
ATOM    157  CA  HIS A1024       0.714  23.553   5.171  1.00 49.99           C
ATOM    158  CB  HIS A1024       1.238  24.226   6.441  1.00 51.40           C
ATOM    159  CG  HIS A1024       1.367  23.295   7.608  1.00 53.33           C
ATOM    160  CD2 HIS A1024       2.447  22.670   8.136  1.00 53.80           C
ATOM    161  ND1 HIS A1024       0.284  22.885   8.357  1.00 54.21           N
ATOM    162  CE1 HIS A1024       0.691  22.048   9.295  1.00 54.57           C
ATOM    163  NE2 HIS A1024       1.999  21.900   9.183  1.00 54.28           N
ATOM    164  C   HIS A1024       1.877  23.218   4.249  1.00 49.79           C
ATOM    165  O   HIS A1024       2.655  22.296   4.513  1.00 49.42           O
ATOM    166  N   GLU A1025       1.987  23.983   3.167  1.00 49.05           N
ATOM    167  CA  GLU A1025       3.043  23.796   2.179  1.00 48.04           C
ATOM    168  CB  GLU A1025       2.813  24.722   0.984  1.00 50.62           C
ATOM    169  CG  GLU A1025       3.876  24.605  -0.092  1.00 54.70           C
ATOM    170  CD  GLU A1025       4.200  25.938  -0.735  1.00 56.22           C
ATOM    171  OE1 GLU A1025       3.295  26.547  -1.343  1.00 58.24           O
ATOM    172  OE2 GLU A1025       5.365  26.377  -0.627  1.00 58.15           O
ATOM    173  C   GLU A1025       4.418  24.081   2.768  1.00 45.80           C
ATOM    174  O   GLU A1025       5.433  23.604   2.258  1.00 46.85           O
ATOM    175  N   GLY A1026       4.447  24.859   3.845  1.00 43.70           N
ATOM    176  CA  GLY A1026       5.709  25.202   4.474  1.00 39.18           C
ATOM    177  C   GLY A1026       6.425  24.069   5.192  1.00 37.08           C
ATOM    178  O   GLY A1026       7.572  24.235   5.608  1.00 36.56           O
ATOM    179  N   PHE A1027       5.771  22.920   5.337  1.00 33.78           N
ATOM    180  CA  PHE A1027       6.390  21.791   6.028  1.00 31.60           C
ATOM    181  CB  PHE A1027       5.397  20.637   6.179  1.00 30.22           C
ATOM    182  CG  PHE A1027       5.951  19.469   6.951  1.00 30.68           C
ATOM    183  CD1 PHE A1027       6.224  19.586   8.312  1.00 29.31           C
ATOM    184  CD2 PHE A1027       6.230  18.266   6.313  1.00 29.88           C
ATOM    185  CE1 PHE A1027       6.768  18.523   9.027  1.00 31.21           C
ATOM    186  CE2 PHE A1027       6.775  17.194   7.020  1.00 30.83           C
ATOM    187  CZ  PHE A1027       7.045  17.326   8.383  1.00 29.69           C
ATOM    188  C   PHE A1027       7.653  21.266   5.345  1.00 29.93           C
ATOM    189  O   PHE A1027       8.741  21.329   5.908  1.00 30.55           O
ATOM    190  N   ALA A1028       7.504  20.739   4.135  1.00 29.11           N
ATOM    191  CA  ALA A1028       8.637  20.196   3.400  1.00 28.78           C
ATOM    192  CB  ALA A1028       8.213  19.836   1.986  1.00 28.60           C
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ATOM    193  C   ALA A1028      9.779  21.204   3.371  1.00 29.38           C
ATOM    194  O   ALA A1028     10.940  20.850   3.579  1.00 28.07           O
ATOM    195  N   LYS A1029      9.424  22.463   3.127  1.00 30.57           N
ATOM    196  CA  LYS A1029     10.372  23.574   3.062  1.00 32.15           C
ATOM    197  CB  LYS A1029      9.608  24.867   2.765  1.00 34.73           C
ATOM    198  CG  LYS A1029     10.076  25.630   1.535  1.00 38.51           C
ATOM    199  CD  LYS A1029     11.365  26.404   1.799  1.00 41.30           C
ATOM    200  CE  LYS A1029     11.653  27.390   0.669  1.00 41.77           C
ATOM    201  NZ  LYS A1029     12.865  28.214   0.927  1.00 43.68           N
ATOM    202  C   LYS A1029     11.173  23.729   4.357  1.00 31.51           C
ATOM    203  O   LYS A1029     12.362  24.043   4.326  1.00 31.47           O
ATOM    204  N   ARG A1030     10.521  23.512   5.495  1.00 31.52           N
ATOM    205  CA  ARG A1030     11.195  23.626   6.787  1.00 32.17           C
ATOM    206  CB  ARG A1030     10.188  23.625   7.949  1.00 34.49           C
ATOM    207  CG  ARG A1030      9.287  24.838   8.058  1.00 38.44           C
ATOM    208  CD  ARG A1030      8.775  25.030   9.497  1.00 41.54           C
ATOM    209  NE  ARG A1030      8.304  23.796  10.134  1.00 44.99           N
ATOM    210  CZ  ARG A1030      9.084  22.932  10.786  1.00 47.20           C
ATOM    211  NH1 ARG A1030     10.388  23.157  10.898  1.00 48.13           N
ATOM    212  NH2 ARG A1030      8.562  21.841  11.337  1.00 47.12           N
ATOM    213  C   ARG A1030     12.145  22.460   7.013  1.00 30.09           C
ATOM    214  O   ARG A1030     13.248  22.631   7.530  1.00 29.93           O
ATOM    215  N   VAL A1031     11.696  21.272   6.628  1.00 27.81           N
ATOM    216  CA  VAL A1031     12.460  20.050   6.819  1.00 25.50           C
ATOM    217  CB  VAL A1031     11.531  18.806   6.723  1.00 24.73           C
ATOM    218  CG1 VAL A1031     12.355  17.518   6.871  1.00 24.35           C
ATOM    219  CG2 VAL A1031     10.465  18.874   7.798  1.00 23.33           C
ATOM    220  C   VAL A1031     13.621  19.835   5.861  1.00 25.01           C
ATOM    221  O   VAL A1031     14.664  19.307   6.252  1.00 25.89           O
ATOM    222  N   LEU A1032     13.451  20.253   4.617  1.00 24.38           N
ATOM    223  CA  LEU A1032     14.472  20.027   3.604  1.00 25.25           C
ATOM    224  CB  LEU A1032     13.818  19.409   2.370  1.00 25.23           C
ATOM    225  CG  LEU A1032     12.870  18.230   2.597  1.00 23.47           C
ATOM    226  CD1 LEU A1032     12.275  17.806   1.266  1.00 23.54           C
ATOM    227  CD2 LEU A1032     13.624  17.072   3.239  1.00 23.54           C
ATOM    228  C   LEU A1032     15.271  21.243   3.169  1.00 25.67           C
ATOM    229  O   LEU A1032     14.778  22.371   3.184  1.00 25.62           O
ATOM    230  N   THR A1033     16.516  20.997   2.776  1.00 26.32           N
ATOM    231  CA  THR A1033     17.387  22.057   2.289  1.00 27.40           C
ATOM    232  CB  THR A1033     18.862  21.628   2.283  1.00 27.76           C
ATOM    233  OG1 THR A1033     19.015  20.490   1.425  1.00 26.35           O
ATOM    234  CG2 THR A1033     19.331  21.271   3.691  1.00 28.10           C
ATOM    235  C   THR A1033     16.963  22.275   0.844  1.00 27.65           C
ATOM    236  O   THR A1033     16.071  21.588   0.350  1.00 27.78           O
ATOM    237  N   ALA A1034     17.612  23.215   0.166  1.00 27.93           N
ATOM    238  CA  ALA A1034     17.294  23.502  -1.225  1.00 28.06           C
ATOM    239  CB  ALA A1034     18.089  24.717  -1.695  1.00 29.35           C
ATOM    240  C   ALA A1034     17.594  22.296  -2.119  1.00 27.67           C
ATOM    241  O   ALA A1034     16.791  21.940  -2.981  1.00 28.26           O
ATOM    242  N   LEU A1035     18.752  21.675  -1.918  1.00 27.21           N
ATOM    243  CA  LEU A1035     19.131  20.510  -2.711  1.00 29.21           C
ATOM    244  CB  LEU A1035     20.531  20.015  -2.318  1.00 28.90           C
ATOM    245  CG  LEU A1035     21.743  20.903  -2.634  1.00 32.48           C
ATOM    246  CD1 LEU A1035     22.960  20.382  -1.877  1.00 31.19           C
ATOM    247  CD2 LEU A1035     22.017  20.924  -4.137  1.00 32.53           C
ATOM    248  C   LEU A1035     18.111  19.388  -2.514  1.00 27.97           C
ATOM    249  O   LEU A1035     17.674  18.758  -3.475  1.00 28.70           O
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ATOM    250  N   GLU A1036      17.731  19.143  -1.267  1.00 27.27           N
ATOM    251  CA  GLU A1036      16.757  18.100  -0.980  1.00 27.49           C
ATOM    252  CB  GLU A1036      16.599  17.938   0.532  1.00 27.41           C
ATOM    253  CG  GLU A1036      17.760  17.195   1.186  1.00 24.80           C
ATOM    254  CD  GLU A1036      17.720  17.252   2.703  1.00 26.22           C
ATOM    255  OE1 GLU A1036      18.225  16.306   3.345  1.00 25.82           O
ATOM    256  OE2 GLU A1036      17.201  18.248   3.256  1.00 26.57           O
ATOM    257  C   GLU A1036      15.413  18.416  -1.634  1.00 27.55           C
ATOM    258  O   GLU A1036      14.740  17.522  -2.138  1.00 25.83           O
ATOM    259  N   MET A1037      15.031  19.691  -1.640  1.00 28.35           N
ATOM    260  CA  MET A1037      13.765  20.099  -2.247  1.00 29.92           C
ATOM    261  CB  MET A1037      13.529  21.599  -2.069  1.00 30.37           C
ATOM    262  CG  MET A1037      12.985  22.000  -0.714  1.00 33.04           C
ATOM    263  SD  MET A1037      11.412  21.198  -0.336  1.00 35.56           S
ATOM    264  CE  MET A1037      10.356  21.852  -1.624  1.00 33.04           C
ATOM    265  C   MET A1037      13.758  19.779  -3.731  1.00 31.19           C
ATOM    266  O   MET A1037      12.711  19.461  -4.306  1.00 30.89           O
ATOM    267  N   GLU A1038      14.928  19.881  -4.352  1.00 31.50           N
ATOM    268  CA  GLU A1038      15.049  19.600  -5.774  1.00 33.14           C
ATOM    269  CB  GLU A1038      16.499  19.777  -6.233  1.00 34.77           C
ATOM    270  CG  GLU A1038      17.005  21.208  -6.093  1.00 39.68           C
ATOM    271  CD  GLU A1038      18.411  21.400  -6.639  1.00 41.20           C
ATOM    272  OE1 GLU A1038      18.981  22.492  -6.434  1.00 44.15           O
ATOM    273  OE2 GLU A1038      18.943  20.467  -7.276  1.00 42.51           O
ATOM    274  C   GLU A1038      14.570  18.186  -6.066  1.00 31.14           C
ATOM    275  O   GLU A1038      13.773  17.974  -6.976  1.00 31.21           O
ATOM    276  N   ARG A1039      15.039  17.215  -5.290  1.00 29.70           N
ATOM    277  CA  ARG A1039      14.606  15.844  -5.521  1.00 28.01           C
ATOM    278  CB  ARG A1039      15.499  14.846  -4.778  1.00 29.96           C
ATOM    279  CG  ARG A1039      15.061  13.406  -5.005  1.00 30.43           C
ATOM    280  CD  ARG A1039      16.213  12.420  -4.969  1.00 30.42           C
ATOM    281  NE  ARG A1039      15.723  11.046  -5.085  1.00 31.83           N
ATOM    282  CZ  ARG A1039      15.203  10.509  -6.188  1.00 32.36           C
ATOM    283  NH1 ARG A1039      15.098  11.214  -7.310  1.00 30.37           N
ATOM    284  NH2 ARG A1039      14.764   9.258  -6.161  1.00 32.43           N
ATOM    285  C   ARG A1039      13.158  15.671  -5.086  1.00 26.14           C
ATOM    286  O   ARG A1039      12.367  15.046  -5.785  1.00 25.25           O
ATOM    287  N   PHE A1040      12.808  16.233  -3.934  1.00 24.86           N
ATOM    288  CA  PHE A1040      11.441  16.132  -3.430  1.00 26.03           C
ATOM    289  CB  PHE A1040      11.273  17.007  -2.178  1.00 25.44           C
ATOM    290  CG  PHE A1040       9.861  17.056  -1.657  1.00 26.41           C
ATOM    291  CD1 PHE A1040       9.298  15.953  -1.027  1.00 25.83           C
ATOM    292  CD2 PHE A1040       9.080  18.194  -1.838  1.00 26.12           C
ATOM    293  CE1 PHE A1040       7.977  15.977  -0.585  1.00 24.52           C
ATOM    294  CE2 PHE A1040       7.752  18.232  -1.399  1.00 26.23           C
ATOM    295  CZ  PHE A1040       7.202  17.119  -0.772  1.00 23.77           C
ATOM    296  C   PHE A1040      10.412  16.548  -4.488  1.00 26.70           C
ATOM    297  O   PHE A1040       9.438  15.837  -4.731  1.00 29.10           O
ATOM    298  N   THR A1041      10.635  17.691  -5.126  1.00 28.25           N
ATOM    299  CA  THR A1041       9.705  18.195  -6.136  1.00 30.17           C
ATOM    300  CB  THR A1041       9.935  19.700  -6.391  1.00 31.11           C
ATOM    301  OG1 THR A1041      11.255  19.911  -6.904  1.00 32.37           O
ATOM    302  CG2 THR A1041       9.781  20.478  -5.099  1.00 29.66           C
ATOM    303  C   THR A1041       9.751  17.456  -7.474  1.00 31.98           C
ATOM    304  O   THR A1041       8.863  17.627  -8.311  1.00 32.84           O
ATOM    305  N   SER A1042      10.781  16.637  -7.673  1.00 31.91           N
ATOM    306  CA  SER A1042      10.933  15.869  -8.909  1.00 32.77           C
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ATOM    307  CB  SER A1042      12.416  15.609  -9.192  1.00 33.18           C
ATOM    308  OG  SER A1042      13.106  16.820  -9.448  1.00 38.29           O
ATOM    309  C   SER A1042      10.215  14.529  -8.831  1.00 32.24           C
ATOM    310  O   SER A1042      10.071  13.834  -9.840  1.00 32.01           O
ATOM    311  N   LEU A1043       9.766  14.175  -7.630  1.00 29.92           N
ATOM    312  CA  LEU A1043       9.101  12.901  -7.394  1.00 28.48           C
ATOM    313  CB  LEU A1043       9.541  12.332  -6.043  1.00 23.86           C
ATOM    314  CG  LEU A1043      11.050  12.097  -5.928  1.00 22.34           C
ATOM    315  CD1 LEU A1043      11.391  11.610  -4.538  1.00 16.25           C
ATOM    316  CD2 LEU A1043      11.493  11.073  -6.977  1.00 20.12           C
ATOM    317  C   LEU A1043       7.587  12.967  -7.454  1.00 30.04           C
ATOM    318  O   LEU A1043       6.995  14.045  -7.415  1.00 29.66           O
ATOM    319  N   LYS A1044       6.970  11.793  -7.524  1.00 30.79           N
ATOM    320  CA  LYS A1044       5.525  11.679  -7.633  1.00 32.89           C
ATOM    321  CB  LYS A1044       5.167  11.102  -9.008  1.00 36.71           C
ATOM    322  CG  LYS A1044       5.598  11.946 -10.199  1.00 40.80           C
ATOM    323  CD  LYS A1044       4.583  13.041 -10.500  1.00 45.23           C
ATOM    324  CE  LYS A1044       4.793  13.615 -11.897  1.00 47.01           C
ATOM    325  NZ  LYS A1044       3.591  14.354 -12.387  1.00 48.79           N
ATOM    326  C   LYS A1044       4.883  10.801  -6.564  1.00 31.67           C
ATOM    327  O   LYS A1044       5.512   9.894  -6.017  1.00 31.18           O
ATOM    328  N   GLY A1045       3.611  11.080  -6.299  1.00 30.41           N
ATOM    329  CA  GLY A1045       2.834  10.321  -5.337  1.00 31.09           C
ATOM    330  C   GLY A1045       3.518   9.841  -4.074  1.00 31.50           C
ATOM    331  O   GLY A1045       4.098  10.631  -3.329  1.00 32.31           O
ATOM    332  N   ARG A1046       3.435   8.534  -3.841  1.00 31.79           N
ATOM    333  CA  ARG A1046       4.009   7.904  -2.659  1.00 34.20           C
ATOM    334  CB  ARG A1046       3.791   6.386  -2.717  1.00 37.24           C
ATOM    335  CG  ARG A1046       2.420   5.971  -3.239  1.00 43.96           C
ATOM    336  CD  ARG A1046       2.301   4.457  -3.386  1.00 48.00           C
ATOM    337  NE  ARG A1046       1.885   3.810  -2.144  1.00 52.29           N
ATOM    338  CZ  ARG A1046       1.793   2.493  -1.980  1.00 53.80           C
ATOM    339  NH1 ARG A1046       1.399   1.995  -0.815  1.00 54.77           N
ATOM    340  NH2 ARG A1046       2.106   1.673  -2.975  1.00 56.31           N
ATOM    341  C   ARG A1046       5.499   8.194  -2.516  1.00 32.21           C
ATOM    342  O   ARG A1046       5.972   8.529  -1.433  1.00 32.82           O
ATOM    343  N   ARG A1047       6.234   8.060  -3.614  1.00 31.05           N
ATOM    344  CA  ARG A1047       7.670   8.292  -3.605  1.00 30.41           C
ATOM    345  CB  ARG A1047       8.235   8.126  -5.015  1.00 32.83           C
ATOM    346  CG  ARG A1047       9.252   7.013  -5.123  1.00 37.44           C
ATOM    347  CD  ARG A1047       8.909   6.055  -6.246  1.00 40.57           C
ATOM    348  NE  ARG A1047       9.734   4.854  -6.183  1.00 45.77           N
ATOM    349  CZ  ARG A1047       9.635   3.835  -7.028  1.00 47.39           C
ATOM    350  NH1 ARG A1047      10.428   2.780  -6.896  1.00 49.29           N
ATOM    351  NH2 ARG A1047       8.743   3.873  -8.008  1.00 48.96           N
ATOM    352  C   ARG A1047       8.040   9.668  -3.062  1.00 28.90           C
ATOM    353  O   ARG A1047       9.006   9.808  -2.307  1.00 27.20           O
ATOM    354  N   GLN A1048       7.268  10.680  -3.444  1.00 26.75           N
ATOM    355  CA  GLN A1048       7.522  12.042  -2.993  1.00 25.72           C
ATOM    356  CB  GLN A1048       6.552  13.014  -3.679  1.00 26.20           C
ATOM    357  CG  GLN A1048       6.972  14.472  -3.555  1.00 26.13           C
ATOM    358  CD  GLN A1048       6.169  15.400  -4.449  1.00 25.31           C
ATOM    359  OE1 GLN A1048       6.618  16.495  -4.773  1.00 27.04           O
ATOM    360  NE2 GLN A1048       4.977  14.970  -4.843  1.00 24.57           N
ATOM    361  C   GLN A1048       7.390  12.162  -1.475  1.00 23.82           C
ATOM    362  O   GLN A1048       8.225  12.783  -0.819  1.00 23.93           O
ATOM    363  N   ILE A1049       6.340  11.568  -0.919  1.00 23.76           N
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ATOM    364  CA  ILE A1049       6.126  11.615   0.523  1.00 23.77           C
ATOM    365  CB  ILE A1049       4.733  11.084   0.900  1.00 25.38           C
ATOM    366  CG2 ILE A1049       4.598  11.001   2.401  1.00 25.87           C
ATOM    367  CG1 ILE A1049       3.657  11.999   0.315  1.00 26.78           C
ATOM    368  CD1 ILE A1049       3.787  13.453   0.751  1.00 30.33           C
ATOM    369  C   ILE A1049       7.181  10.776   1.228  1.00 22.10           C
ATOM    370  O   ILE A1049       7.673  11.150   2.283  1.00 21.61           O
ATOM    371  N   GLU A1050       7.525   9.642   0.631  1.00 22.60           N
ATOM    372  CA  GLU A1050       8.532   8.755   1.200  1.00 23.30           C
ATOM    373  CB  GLU A1050       8.667   7.478   0.363  1.00 23.16           C
ATOM    374  CG  GLU A1050       9.889   6.659   0.739  1.00 28.58           C
ATOM    375  CD  GLU A1050       9.978   6.445   2.234  1.00 29.28           C
ATOM    376  OE1 GLU A1050      11.108   6.330   2.760  1.00 30.35           O
ATOM    377  OE2 GLU A1050       8.909   6.394   2.882  1.00 30.91           O
ATOM    378  C   GLU A1050       9.885   9.454   1.279  1.00 22.26           C
ATOM    379  O   GLU A1050      10.627   9.288   2.253  1.00 23.12           O
ATOM    380  N   TYR A1051      10.209  10.245   0.262  1.00 22.07           N
ATOM    381  CA  TYR A1051      11.478  10.948   0.262  1.00 21.63           C
ATOM    382  CB  TYR A1051      11.686  11.704  -1.054  1.00 20.34           C
ATOM    383  CG  TYR A1051      12.992  12.472  -1.082  1.00 20.50           C
ATOM    384  CD1 TYR A1051      13.055  13.801  -0.659  1.00 20.43           C
ATOM    385  CE1 TYR A1051      14.269  14.490  -0.621  1.00 20.01           C
ATOM    386  CD2 TYR A1051      14.179  11.849  -1.475  1.00 20.86           C
ATOM    387  CE2 TYR A1051      15.400  12.531  -1.441  1.00 21.25           C
ATOM    388  CZ  TYR A1051      15.432  13.852  -1.010  1.00 19.89           C
ATOM    389  OH  TYR A1051      16.630  14.525  -0.959  1.00 20.04           O
ATOM    390  C   TYR A1051      11.557  11.920   1.434  1.00 21.88           C
ATOM    391  O   TYR A1051      12.557  11.963   2.152  1.00 20.59           O
ATOM    392  N   LEU A1052      10.499  12.702   1.621  1.00 21.63           N
ATOM    393  CA  LEU A1052      10.452  13.671   2.706  1.00 21.68           C
ATOM    394  CB  LEU A1052       9.179  14.513   2.590  1.00 20.47           C
ATOM    395  CG  LEU A1052       8.808  15.418   3.765  1.00 22.03           C
ATOM    396  CD1 LEU A1052       9.962  16.348   4.120  1.00 21.80           C
ATOM    397  CD2 LEU A1052       7.566  16.209   3.381  1.00 20.67           C
ATOM    398  C   LEU A1052      10.504  12.964   4.055  1.00 20.98           C
ATOM    399  O   LEU A1052      11.314  13.306   4.919  1.00 21.63           O
ATOM    400  N   ALA A1053       9.639  11.971   4.223  1.00 19.65           N
ATOM    401  CA  ALA A1053       9.578  11.190   5.457  1.00 18.20           C
ATOM    402  CB  ALA A1053       8.567  10.054   5.299  1.00 18.13           C
ATOM    403  C   ALA A1053      10.952  10.614   5.818  1.00 17.32           C
ATOM    404  O   ALA A1053      11.356  10.642   6.982  1.00 15.65           O
ATOM    405  N   GLY A1054      11.660  10.092   4.816  1.00 16.84           N
ATOM    406  CA  GLY A1054      12.978   9.516   5.049  1.00 16.81           C
ATOM    407  C   GLY A1054      13.981  10.540   5.542  1.00 16.80           C
ATOM    408  O   GLY A1054      14.788  10.270   6.439  1.00 16.69           O
ATOM    409  N   ARG A1055      13.946  11.728   4.952  1.00 18.02           N
ATOM    410  CA  ARG A1055      14.866  12.772   5.364  1.00 18.20           C
ATOM    411  CB  ARG A1055      14.811  13.928   4.371  1.00 19.98           C
ATOM    412  CG  ARG A1055      15.908  13.873   3.303  1.00 19.89           C
ATOM    413  CD  ARG A1055      15.963  12.534   2.565  1.00 21.10           C
ATOM    414  NE  ARG A1055      17.109  12.487   1.652  1.00 21.61           N
ATOM    415  CZ  ARG A1055      17.449  11.426   0.925  1.00 21.69           C
ATOM    416  NH1 ARG A1055      16.730  10.311   0.999  1.00 20.97           N
ATOM    417  NH2 ARG A1055      18.508  11.481   0.122  1.00 17.88           N
ATOM    418  C   ARG A1055      14.534  13.243   6.781  1.00 18.74           C
ATOM    419  O   ARG A1055      15.433  13.506   7.585  1.00 16.13           O
ATOM    420  N   TRP A1056      13.243  13.324   7.086  1.00 17.18           N
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ATOM    421  CA  TRP A1056      12.793  13.732   8.412  1.00 19.43           C
ATOM    422  CB  TRP A1056      11.267  13.703   8.468  1.00 21.99           C
ATOM    423  CG  TRP A1056      10.694  14.264   9.713  1.00 26.53           C
ATOM    424  CD2 TRP A1056      10.311  13.533  10.877  1.00 28.20           C
ATOM    425  CE2 TRP A1056       9.816  14.468  11.813  1.00 28.53           C
ATOM    426  CE3 TRP A1056      10.333  12.177  11.222  1.00 29.04           C
ATOM    427  CD1 TRP A1056      10.431  15.581   9.978  1.00 26.38           C
ATOM    428  NE1 TRP A1056       9.905  15.708  11.237  1.00 29.97           N
ATOM    429  CZ2 TRP A1056       9.347  14.090  13.073  1.00 30.15           C
ATOM    430  CZ3 TRP A1056       9.868  11.801  12.476  1.00 31.30           C
ATOM    431  CH2 TRP A1056       9.379  12.755  13.386  1.00 31.45           C
ATOM    432  C   TRP A1056      13.343  12.710   9.412  1.00 18.72           C
ATOM    433  O   TRP A1056      13.992  13.063  10.397  1.00 16.51           O
ATOM    434  N   SER A1057      13.084  11.435   9.137  1.00 17.50           N
ATOM    435  CA  SER A1057      13.532  10.352  10.011  1.00 19.23           C
ATOM    436  CB  SER A1057      13.053   9.009   9.448  1.00 21.41           C
ATOM    437  OG  SER A1057      13.243   7.971  10.388  1.00 25.06           O
ATOM    438  C   SER A1057      15.053  10.320  10.201  1.00 19.01           C
ATOM    439  O   SER A1057      15.549  10.120  11.317  1.00 19.71           O
ATOM    440  N   ALA A1058      15.789  10.511   9.111  1.00 16.54           N
ATOM    441  CA  ALA A1058      17.243  10.495   9.162  1.00 16.02           C
ATOM    442  CB  ALA A1058      17.798  10.607   7.757  1.00 15.16           C
ATOM    443  C   ALA A1058      17.790  11.616  10.035  1.00 15.70           C
ATOM    444  O   ALA A1058      18.707  11.411  10.836  1.00 16.78           O
ATOM    445  N   LYS A1059      17.221  12.805   9.884  1.00 16.69           N
ATOM    446  CA  LYS A1059      17.664  13.957  10.648  1.00 18.17           C
ATOM    447  CB  LYS A1059      17.079  15.240  10.042  1.00 18.92           C
ATOM    448  CG  LYS A1059      17.536  15.450   8.588  1.00 19.75           C
ATOM    449  CD  LYS A1059      17.059  16.773   8.003  1.00 19.99           C
ATOM    450  CE  LYS A1059      17.531  16.933   6.549  1.00 19.86           C
ATOM    451  NZ  LYS A1059      17.304  18.322   6.031  1.00 20.25           N
ATOM    452  C   LYS A1059      17.302  13.818  12.116  1.00 19.11           C
ATOM    453  O   LYS A1059      18.067  14.222  12.995  1.00 18.56           O
ATOM    454  N   GLU A1060      16.143  13.225  12.374  1.00 18.52           N
ATOM    455  CA  GLU A1060      15.679  12.998  13.736  1.00 21.84           C
ATOM    456  CB  GLU A1060      14.247  12.448  13.704  1.00 26.26           C
ATOM    457  CG  GLU A1060      13.428  12.722  14.952  1.00 33.87           C
ATOM    458  CD  GLU A1060      13.083  14.192  15.130  1.00 35.47           C
ATOM    459  OE1 GLU A1060      12.298  14.733  14.322  1.00 38.74           O
ATOM    460  OE2 GLU A1060      13.601  14.811  16.082  1.00 39.14           O
ATOM    461  C   GLU A1060      16.631  11.982  14.390  1.00 21.03           C
ATOM    462  O   GLU A1060      17.045  12.149  15.544  1.00 18.91           O
ATOM    463  N   ALA A1061      16.991  10.943  13.635  1.00 18.55           N
ATOM    464  CA  ALA A1061      17.898   9.910  14.131  1.00 18.39           C
ATOM    465  CB  ALA A1061      18.017   8.777  13.113  1.00 15.08           C
ATOM    466  C   ALA A1061      19.283  10.490  14.429  1.00 18.00           C
ATOM    467  O   ALA A1061      19.905  10.151  15.436  1.00 17.16           O
ATOM    468  N   PHE A1062      19.768  11.352  13.542  1.00 18.20           N
ATOM    469  CA  PHE A1062      21.069  11.970  13.741  1.00 20.25           C
ATOM    470  CB  PHE A1062      21.433  12.855  12.546  1.00 20.89           C
ATOM    471  CG  PHE A1062      22.721  13.605  12.730  1.00 23.32           C
ATOM    472  CD1 PHE A1062      22.761  14.776  13.489  1.00 24.72           C
ATOM    473  CD2 PHE A1062      23.908  13.112  12.194  1.00 23.55           C
ATOM    474  CE1 PHE A1062      23.973  15.443  13.717  1.00 24.71           C
ATOM    475  CE2 PHE A1062      25.119  13.766  12.414  1.00 23.92           C
ATOM    476  CZ  PHE A1062      25.150  14.934  13.179  1.00 25.42           C
ATOM    477  C   PHE A1062      21.090  12.800  15.026  1.00 21.33           C
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ATOM    478  O    PHE A1062      22.035  12.726  15.809  1.00 20.18          O
ATOM    479  N    SER A1063      20.045  13.593  15.244  1.00 22.52          N
ATOM    480  CA   SER A1063      19.973  14.420  16.445  1.00 24.40          C
ATOM    481  CB   SER A1063      18.679  15.230  16.447  1.00 25.96          C
ATOM    482  OG   SER A1063      18.670  16.112  15.338  1.00 30.50          O
ATOM    483  C    SER A1063      20.060  13.562  17.704  1.00 24.30          C
ATOM    484  O    SER A1063      20.714  13.938  18.682  1.00 23.77          O
ATOM    485  N    LYS A1064      19.407  12.406  17.678  1.00 22.33          N
ATOM    486  CA   LYS A1064      19.451  11.513  18.823  1.00 23.04          C
ATOM    487  CB   LYS A1064      18.405  10.406  18.684  1.00 23.38          C
ATOM    488  CG   LYS A1064      16.971  10.881  18.903  1.00 25.10          C
ATOM    489  CD   LYS A1064      15.986   9.734  18.726  1.00 28.41          C
ATOM    490  CE   LYS A1064      14.548  10.194  18.924  1.00 32.98          C
ATOM    491  NZ   LYS A1064      13.566   9.195  18.410  1.00 35.52          N
ATOM    492  C    LYS A1064      20.845  10.907  18.949  1.00 22.52          C
ATOM    493  O    LYS A1064      21.285  10.572  20.047  1.00 21.41          O
ATOM    494  N    ALA A1065      21.539  10.774  17.820  1.00 21.47          N
ATOM    495  CA   ALA A1065      22.885  10.220  17.826  1.00 22.53          C
ATOM    496  CB   ALA A1065      23.379   9.980  16.399  1.00 20.33          C
ATOM    497  C    ALA A1065      23.796  11.207  18.537  1.00 24.41          C
ATOM    498  O    ALA A1065      24.751  10.811  19.201  1.00 24.00          O
ATOM    499  N    MET A1066      23.499  12.496  18.390  1.00 28.05          N
ATOM    500  CA   MET A1066      24.283  13.530  19.049  1.00 32.04          C
ATOM    501  CB   MET A1066      24.167  14.859  18.309  1.00 34.23          C
ATOM    502  CG   MET A1066      24.913  14.895  16.997  1.00 40.28          C
ATOM    503  SD   MET A1066      25.423  16.574  16.602  1.00 48.25          S
ATOM    504  CE   MET A1066      27.174  16.492  17.024  1.00 46.99          C
ATOM    505  C    MET A1066      23.826  13.716  20.493  1.00 33.24          C
ATOM    506  O    MET A1066      24.456  14.443  21.254  1.00 33.60          O
ATOM    507  N    GLY A1067      22.720  13.069  20.856  1.00 33.56          N
ATOM    508  CA   GLY A1067      22.217  13.159  22.216  1.00 34.99          C
ATOM    509  C    GLY A1067      21.311  14.339  22.519  1.00 36.72          C
ATOM    510  O    GLY A1067      21.237  14.787  23.666  1.00 34.92          O
ATOM    511  N    THR A1068      20.616  14.845  21.504  1.00 38.07          N
ATOM    512  CA   THR A1068      19.716  15.975  21.699  1.00 39.81          C
ATOM    513  CB   THR A1068      20.455  17.316  21.504  1.00 40.69          C
ATOM    514  OG1  THR A1068      19.535  18.400  21.687  1.00 42.07          O
ATOM    515  CG2  THR A1068      21.062  17.396  20.114  1.00 40.32          C
ATOM    516  C    THR A1068      18.520  15.922  20.752  1.00 40.62          C
ATOM    517  O    THR A1068      18.293  14.915  20.077  1.00 41.29          O
ATOM    518  N    GLY A1069      17.753  17.007  20.716  1.00 40.61          N
ATOM    519  CA   GLY A1069      16.586  17.061  19.856  1.00 40.92          C
ATOM    520  C    GLY A1069      16.835  17.849  18.587  1.00 40.96          C
ATOM    521  O    GLY A1069      17.705  18.722  18.547  1.00 41.30          O
ATOM    522  N    ILE A1070      16.065  17.545  17.547  1.00 40.13          N
ATOM    523  CA   ILE A1070      16.207  18.224  16.266  1.00 40.90          C
ATOM    524  CB   ILE A1070      15.288  17.591  15.200  1.00 40.70          C
ATOM    525  CG2  ILE A1070      13.828  17.774  15.593  1.00 40.55          C
ATOM    526  CG1  ILE A1070      15.557  18.227  13.835  1.00 41.43          C
ATOM    527  CD1  ILE A1070      16.980  18.055  13.352  1.00 39.85          C
ATOM    528  C    ILE A1070      15.876  19.712  16.387  1.00 41.49          C
ATOM    529  O    ILE A1070      16.354  20.533  15.598  1.00 41.31          O
ATOM    530  N    SER A1071      15.058  20.054  17.379  1.00 41.78          N
ATOM    531  CA   SER A1071      14.672  21.442  17.594  1.00 42.83          C
ATOM    532  CB   SER A1071      13.546  21.531  18.633  1.00 43.42          C
ATOM    533  OG   SER A1071      13.938  20.980  19.877  1.00 44.55          O
ATOM    534  C    SER A1071      15.856  22.295  18.039  1.00 43.32          C
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ATOM    535   O    SER A1071       15.792  23.523  17.984  1.00 44.46           O
ATOM    536   N    LYS A1072       16.938  21.648  18.472  1.00 42.56           N
ATOM    537   CA   LYS A1072       18.123  22.377  18.911  1.00 41.56           C
ATOM    538   CB   LYS A1072       18.744  21.706  20.141  1.00 41.25           C
ATOM    539   CG   LYS A1072       19.600  20.489  19.844  0.05 41.20           C
ATOM    540   CD   LYS A1072       21.069  20.860  19.724  0.05 41.09           C
ATOM    541   CE   LYS A1072       21.602  21.414  21.037  0.05 41.02           C
ATOM    542   NZ   LYS A1072       21.470  20.437  22.152  0.05 40.94           N
ATOM    543   C    LYS A1072       19.139  22.462  17.777  1.00 41.40           C
ATOM    544   O    LYS A1072       19.840  23.462  17.643  1.00 41.76           O
ATOM    545   N    LEU A1073       19.220  21.413  16.960  1.00 40.37           N
ATOM    546   CA   LEU A1073       20.142  21.411  15.829  1.00 38.42           C
ATOM    547   CB   LEU A1073       20.439  19.985  15.339  1.00 39.84           C
ATOM    548   CG   LEU A1073       21.489  19.100  16.015  1.00 40.56           C
ATOM    549   CD1  LEU A1073       22.585  19.956  16.635  1.00 41.19           C
ATOM    550   CD2  LEU A1073       20.820  18.243  17.064  1.00 42.23           C
ATOM    551   C    LEU A1073       19.556  22.198  14.664  1.00 36.59           C
ATOM    552   O    LEU A1073       20.205  23.091  14.123  1.00 36.83           O
ATOM    553   N    GLY A1074       18.326  21.849  14.285  1.00 34.67           N
ATOM    554   CA   GLY A1074       17.653  22.500  13.172  1.00 31.12           C
ATOM    555   C    GLY A1074       17.746  21.631  11.927  1.00 29.81           C
ATOM    556   O    GLY A1074       18.830  21.176  11.576  1.00 29.20           O
ATOM    557   N    PHE A1075       16.619  21.396  11.260  1.00 29.29           N
ATOM    558   CA   PHE A1075       16.595  20.565  10.051  1.00 29.15           C
ATOM    559   CB   PHE A1075       15.163  20.442   9.502  1.00 28.80           C
ATOM    560   CG   PHE A1075       14.244  19.610  10.353  1.00 29.16           C
ATOM    561   CD1  PHE A1075       13.306  20.212  11.183  1.00 29.51           C
ATOM    562   CD2  PHE A1075       14.309  18.221  10.315  1.00 28.39           C
ATOM    563   CE1  PHE A1075       12.440  19.443  11.964  1.00 28.84           C
ATOM    564   CE2  PHE A1075       13.451  17.445  11.089  1.00 30.94           C
ATOM    565   CZ   PHE A1075       12.514  18.059  11.916  1.00 29.27           C
ATOM    566   C    PHE A1075       17.500  21.072   8.922  1.00 29.25           C
ATOM    567   O    PHE A1075       18.096  20.275   8.193  1.00 27.78           O
ATOM    568   N    GLN A1076       17.589  22.393   8.772  1.00 29.64           N
ATOM    569   CA   GLN A1076       18.397  23.008   7.717  1.00 29.73           C
ATOM    570   CB   GLN A1076       18.046  24.497   7.593  1.00 31.55           C
ATOM    571   CG   GLN A1076       16.585  24.746   7.253  1.00 31.77           C
ATOM    572   CD   GLN A1076       16.202  24.181   5.895  1.00 32.15           C
ATOM    573   OE1  GLN A1076       15.044  23.849   5.652  1.00 34.09           O
ATOM    574   NE2  GLN A1076       17.174  24.084   5.002  1.00 32.35           N
ATOM    575   C    GLN A1076       19.888  22.845   7.975  1.00 31.01           C
ATOM    576   O    GLN A1076       20.724  23.105   7.099  1.00 30.59           O
ATOM    577   N    ASP A1077       20.211  22.401   9.183  1.00 30.30           N
ATOM    578   CA   ASP A1077       21.592  22.182   9.588  1.00 30.99           C
ATOM    579   CB   ASP A1077       21.684  22.266  11.111  1.00 34.42           C
ATOM    580   CG   ASP A1077       22.894  23.034  11.578  1.00 38.94           C
ATOM    581   OD1  ASP A1077       24.025  22.549  11.358  1.00 40.63           O
ATOM    582   OD2  ASP A1077       22.710  24.127  12.162  1.00 41.18           O
ATOM    583   C    ASP A1077       22.066  20.803   9.114  1.00 28.98           C
ATOM    584   O    ASP A1077       23.247  20.470   9.198  1.00 27.03           O
ATOM    585   N    LEU A1078       21.134  19.998   8.622  1.00 26.47           N
ATOM    586   CA   LEU A1078       21.472  18.665   8.155  1.00 25.11           C
ATOM    587   CB   LEU A1078       20.782  17.614   9.029  1.00 25.83           C
ATOM    588   CG   LEU A1078       21.066  17.667  10.529  1.00 25.61           C
ATOM    589   CD1  LEU A1078       20.075  16.787  11.291  1.00 26.16           C
ATOM    590   CD2  LEU A1078       22.494  17.227  10.775  1.00 26.52           C
ATOM    591   C    LEU A1078       21.015  18.495   6.723  1.00 24.62           C
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ATOM    592  O   LEU A1078      20.052  19.125   6.296  1.00 25.13           O
ATOM    593  N   GLU A1079      21.710  17.648   5.975  1.00 23.38           N
ATOM    594  CA  GLU A1079      21.312  17.388   4.603  1.00 22.76           C
ATOM    595  CB  GLU A1079      22.008  18.338   3.639  1.00 24.57           C
ATOM    596  CG  GLU A1079      21.425  18.299   2.241  1.00 25.55           C
ATOM    597  CD  GLU A1079      22.219  19.146   1.274  1.00 28.95           C
ATOM    598  OE1 GLU A1079      23.415  18.844   1.074  1.00 28.46           O
ATOM    599  OE2 GLU A1079      21.652  20.114   0.722  1.00 31.06           O
ATOM    600  C   GLU A1079      21.639  15.958   4.220  1.00 21.67           C
ATOM    601  O   GLU A1079      22.747  15.476   4.458  1.00 21.79           O
ATOM    602  N   VAL A1080      20.667  15.283   3.626  1.00 18.92           N
ATOM    603  CA  VAL A1080      20.861  13.904   3.208  1.00 19.27           C
ATOM    604  CB  VAL A1080      19.836  12.967   3.881  1.00 18.84           C
ATOM    605  CG1 VAL A1080      20.181  11.504   3.578  1.00 18.64           C
ATOM    606  CG2 VAL A1080      19.801  13.230   5.368  1.00 18.66           C
ATOM    607  C   VAL A1080      20.690  13.798   1.696  1.00 19.85           C
ATOM    608  O   VAL A1080      19.596  14.003   1.169  1.00 19.06           O
ATOM    609  N   LEU A1081      21.780  13.497   1.003  1.00 19.76           N
ATOM    610  CA  LEU A1081      21.742  13.332  -0.442  1.00 20.15           C
ATOM    611  CB  LEU A1081      22.808  14.210  -1.111  1.00 19.63           C
ATOM    612  CG  LEU A1081      22.640  15.717  -0.878  1.00 19.82           C
ATOM    613  CD1 LEU A1081      23.817  16.488  -1.475  1.00 19.43           C
ATOM    614  CD2 LEU A1081      21.326  16.171  -1.485  1.00 18.80           C
ATOM    615  C   LEU A1081      22.037  11.861  -0.696  1.00 20.78           C
ATOM    616  O   LEU A1081      22.097  11.067   0.242  1.00 19.52           O
ATOM    617  N   ASN A1082      22.224  11.495  -1.957  1.00 21.64           N
ATOM    618  CA  ASN A1082      22.521  10.110  -2.301  1.00 22.51           C
ATOM    619  CB  ASN A1082      21.430   9.574  -3.230  1.00 21.83           C
ATOM    620  CG  ASN A1082      20.134   9.281  -2.485  1.00 24.97           C
ATOM    621  OD1 ASN A1082      19.930   8.174  -1.973  1.00 26.72           O
ATOM    622  ND2 ASN A1082      19.264  10.275  -2.402  1.00 23.64           N
ATOM    623  C   ASN A1082      23.897  10.029  -2.954  1.00 22.59           C
ATOM    624  O   ASN A1082      24.196  10.786  -3.876  1.00 23.10           O
ATOM    625  N   ASN A1083      24.738   9.118  -2.472  1.00 21.81           N
ATOM    626  CA  ASN A1083      26.079   8.998  -3.021  1.00 24.05           C
ATOM    627  CB  ASN A1083      27.011   8.298  -2.018  1.00 21.32           C
ATOM    628  CG  ASN A1083      26.634   6.849  -1.748  1.00 23.86           C
ATOM    629  OD1 ASN A1083      27.083   6.269  -0.752  1.00 23.67           O
ATOM    630  ND2 ASN A1083      25.835   6.249  -2.631  1.00 20.56           N
ATOM    631  C   ASN A1083      26.112   8.315  -4.385  1.00 26.50           C
ATOM    632  O   ASN A1083      25.065   7.986  -4.951  1.00 25.00           O
ATOM    633  N   GLU A1084      27.313   8.118  -4.921  1.00 28.34           N
ATOM    634  CA  GLU A1084      27.447   7.514  -6.237  1.00 32.10           C
ATOM    635  CB  GLU A1084      28.907   7.561  -6.700  1.00 32.77           C
ATOM    636  CG  GLU A1084      29.885   6.749  -5.877  1.00 35.30           C
ATOM    637  CD  GLU A1084      31.327   7.041  -6.263  1.00 38.54           C
ATOM    638  OE1 GLU A1084      31.628   7.058  -7.478  1.00 39.35           O
ATOM    639  OE2 GLU A1084      32.160   7.252  -5.356  1.00 40.56           O
ATOM    640  C   GLU A1084      26.906   6.092  -6.307  1.00 32.37           C
ATOM    641  O   GLU A1084      26.582   5.610  -7.386  1.00 34.17           O
ATOM    642  N   ARG A1085      26.811   5.426  -5.158  1.00 31.86           N
ATOM    643  CA  ARG A1085      26.278   4.069  -5.111  1.00 29.86           C
ATOM    644  CB  ARG A1085      26.967   3.259  -4.009  1.00 30.40           C
ATOM    645  CG  ARG A1085      28.442   2.992  -4.269  0.05 30.17           C
ATOM    646  CD  ARG A1085      28.668   2.173  -5.540  0.05 30.07           C
ATOM    647  NE  ARG A1085      28.539   0.730  -5.333  0.05 30.12           N
ATOM    648  CZ  ARG A1085      27.396   0.089  -5.107  0.05 30.07           C
ATOM    649  NH1 ARG A1085      26.249   0.751  -5.054  0.05 30.16           N
ATOM    650  NH2 ARG A1085      27.401  -1.226  -4.938  0.05 30.04           N
ATOM    651  C   ARG A1085      24.768   4.117  -4.860  1.00 28.84           C
ATOM    652  O   ARG A1085      24.121   3.084  -4.683  1.00 28.73           O
ATOM    653  N   GLY A1086      24.222   5.329  -4.842  1.00 26.09           N
ATOM    654  CA  GLY A1086      22.797   5.514  -4.635  1.00 24.49           C
ATOM    655  C   GLY A1086      22.286   5.493  -3.202  1.00 23.98           C
ATOM    656  O   GLY A1086      21.090   5.649  -2.975  1.00 25.43           O
ATOM    657  N   ALA A1087      23.172   5.306  -2.233  1.00 21.90           N
ATOM    658  CA  ALA A1087      22.755   5.259  -0.836  1.00 21.27           C
ATOM    659  CB  ALA A1087      23.704   4.379  -0.042  1.00 21.23           C
ATOM    660  C   ALA A1087      22.689   6.653  -0.205  1.00 21.63           C
ATOM    661  O   ALA A1087      23.508   7.529  -0.499  1.00 19.21           O
ATOM    662  N   PRO A1088      21.700   6.872   0.668  1.00 20.00           N
ATOM    663  CD  PRO A1088      20.666   5.919   1.105  1.00 20.94           C
ATOM    664  CA  PRO A1088      21.544   8.164   1.335  1.00 20.18           C
ATOM    665  CB  PRO A1088      20.212   8.013   2.064  1.00 20.85           C
ATOM    666  CG  PRO A1088      20.183   6.545   2.390  1.00 22.84           C
ATOM    667  C   PRO A1088      22.714   8.380   2.281  1.00 19.50           C
ATOM    668  O   PRO A1088      23.220   7.431   2.887  1.00 17.61           O
ATOM    669  N   TYR A1089      23.164   9.621   2.395  1.00 18.16           N
ATOM    670  CA  TYR A1089      24.281   9.913   3.279  1.00 19.12           C
ATOM    671  CB  TYR A1089      25.611   9.642   2.557  1.00 20.66           C
ATOM    672  CG  TYR A1089      25.977  10.698   1.534  1.00 23.33           C
ATOM    673  CD1 TYR A1089      26.869  11.724   1.853  1.00 22.08           C
ATOM    674  CE1 TYR A1089      27.211  12.699   0.916  1.00 22.82           C
ATOM    675  CD2 TYR A1089      25.426  10.673   0.249  1.00 22.30           C
ATOM    676  CE2 TYR A1089      25.752  11.642  -0.692  1.00 23.44           C
ATOM    677  CZ  TYR A1089      26.649  12.655  -0.354  1.00 25.15           C
ATOM    678  OH  TYR A1089      26.987  13.614  -1.288  1.00 24.63           O
ATOM    679  C   TYR A1089      24.205  11.363   3.699  1.00 17.64           C
ATOM    680  O   TYR A1089      23.578  12.178   3.023  1.00 16.44           O
ATOM    681  N   PHE A1090      24.824  11.691   4.825  1.00 17.81           N
ATOM    682  CA  PHE A1090      24.801  13.070   5.277  1.00 17.81           C
ATOM    683  CB  PHE A1090      25.019  13.159   6.791  1.00 17.48           C
ATOM    684  CG  PHE A1090      23.777  12.873   7.595  1.00 17.01           C
ATOM    685  CD1 PHE A1090      23.434  11.568   7.938  1.00 17.02           C
ATOM    686  CD2 PHE A1090      22.919  13.910   7.962  1.00 16.23           C
ATOM    687  CE1 PHE A1090      22.247  11.293   8.632  1.00 17.95           C
ATOM    688  CE2 PHE A1090      21.732  13.647   8.656  1.00 17.65           C
ATOM    689  CZ  PHE A1090      21.397  12.333   8.989  1.00 16.73           C
ATOM    690  C   PHE A1090      25.852  13.892   4.547  1.00 20.29           C
ATOM    691  O   PHE A1090      27.054  13.713   4.749  1.00 19.58           O
ATOM    692  N   SER A1091      25.384  14.767   3.665  1.00 21.20           N
ATOM    693  CA  SER A1091      26.266  15.646   2.921  1.00 23.08           C
ATOM    694  CB  SER A1091      25.592  16.086   1.618  1.00 24.12           C
ATOM    695  OG  SER A1091      24.281  16.567   1.852  1.00 24.36           O
ATOM    696  C   SER A1091      26.580  16.856   3.806  1.00 24.80           C
ATOM    697  O   SER A1091      27.613  17.507   3.642  1.00 25.24           O
ATOM    698  N   GLN A1092      25.685  17.141   4.752  1.00 24.80           N
ATOM    699  CA  GLN A1092      25.853  18.254   5.688  1.00 24.09           C
ATOM    700  CB  GLN A1092      24.970  19.448   5.296  1.00 26.54           C
ATOM    701  CG  GLN A1092      25.294  20.132   3.971  1.00 30.86           C
ATOM    702  CD  GLN A1092      26.711  20.678   3.907  1.00 34.83           C
ATOM    703  OE1 GLN A1092      27.257  21.147   4.910  1.00 37.27           O
ATOM    704  NE2 GLN A1092      27.308  20.637   2.717  1.00 34.99           N
ATOM    705  C   GLN A1092      25.453  17.803   7.096  1.00 23.97           C
ATOM    706  O   GLN A1092      24.343  17.295   7.300  1.00 22.36           O
ATOM    707  N   ALA A1093      26.356  17.989   8.057  1.00 20.55           N
ATOM    708  CA  ALA A1093      26.097  17.621   9.447  1.00 21.00           C
ATOM    709  CB  ALA A1093      25.948  16.101   9.580  1.00 17.57           C
ATOM    710  C   ALA A1093      27.235  18.114  10.336  1.00 22.11           C
ATOM    711  O   ALA A1093      28.392  18.120   9.920  1.00 23.23           O
ATOM    712  N   PRO A1094      26.918  18.536  11.573  1.00 23.31           N
ATOM    713  CD  PRO A1094      25.550  18.680  12.111  1.00 23.07           C
ATOM    714  CA  PRO A1094      27.907  19.034  12.533  1.00 24.58           C
ATOM    715  CB  PRO A1094      27.053  19.820  13.521  1.00 24.45           C
ATOM    716  CG  PRO A1094      25.798  18.997  13.575  1.00 24.77           C
ATOM    717  C   PRO A1094      28.687  17.909  13.219  1.00 26.12           C
ATOM    718  O   PRO A1094      28.675  17.791  14.445  1.00 27.56           O
ATOM    719  N   PHE A1095      29.353  17.079  12.423  1.00 26.05           N
ATOM    720  CA  PHE A1095      30.139  15.975  12.957  1.00 26.02           C
ATOM    721  CB  PHE A1095      29.279  14.710  13.090  1.00 27.36           C
ATOM    722  CG  PHE A1095      30.016  13.544  13.674  1.00 26.42           C
ATOM    723  CD1 PHE A1095      30.208  12.385  12.931  1.00 26.59           C
ATOM    724  CD2 PHE A1095      30.571  13.625  14.950  1.00 27.10           C
ATOM    725  CE1 PHE A1095      30.946  11.324  13.446  1.00 26.29           C
ATOM    726  CE2 PHE A1095      31.312  12.574  15.475  1.00 25.68           C
ATOM    727  CZ  PHE A1095      31.502  11.417  14.720  1.00 27.52           C
ATOM    728  C   PHE A1095      31.305  15.727  12.012  1.00 26.40           C
ATOM    729  O   PHE A1095      31.122  15.681  10.792  1.00 25.80           O
ATOM    730  N   SER A1096      32.498  15.560  12.577  1.00 26.14           N
ATOM    731  CA  SER A1096      33.705  15.357  11.781  1.00 29.05           C
ATOM    732  CB  SER A1096      34.909  15.969  12.500  1.00 30.71           C
ATOM    733  OG  SER A1096      34.768  17.373  12.603  1.00 37.13           O
ATOM    734  C   SER A1096      34.039  13.919  11.413  1.00 28.85           C
ATOM    735  O   SER A1096      34.702  13.678  10.407  1.00 29.54           O
ATOM    736  N   GLY A1097      33.595  12.968  12.229  1.00 28.58           N
ATOM    737  CA  GLY A1097      33.888  11.573  11.957  1.00 27.16           C
ATOM    738  C   GLY A1097      32.991  10.948  10.907  1.00 26.54           C
ATOM    739  O   GLY A1097      32.406  11.648  10.077  1.00 27.09           O
ATOM    740  N   LYS A1098      32.888   9.624  10.931  1.00 24.94           N
ATOM    741  CA  LYS A1098      32.045   8.930   9.973  1.00 25.69           C
ATOM    742  CB  LYS A1098      32.587   7.535   9.644  1.00 29.36           C
ATOM    743  CG  LYS A1098      33.687   7.015  10.547  1.00 33.98           C
ATOM    744  CD  LYS A1098      35.051   7.532  10.120  1.00 37.43           C
ATOM    745  CE  LYS A1098      36.164   6.583  10.568  1.00 39.11           C
ATOM    746  NZ  LYS A1098      36.119   6.320  12.033  1.00 41.00           N
ATOM    747  C   LYS A1098      30.625   8.796  10.492  1.00 24.62           C
ATOM    748  O   LYS A1098      30.393   8.494  11.668  1.00 22.63           O
ATOM    749  N   ILE A1099      29.677   9.033   9.600  1.00 22.17           N
ATOM    750  CA  ILE A1099      28.273   8.932   9.941  1.00 21.57           C
ATOM    751  CB  ILE A1099      27.514  10.193   9.523  1.00 19.45           C
ATOM    752  CG2 ILE A1099      26.039  10.056   9.905  1.00 18.01           C
ATOM    753  CG1 ILE A1099      28.155  11.419  10.177  1.00 20.05           C
ATOM    754  CD1 ILE A1099      27.677  12.738   9.613  1.00 19.45           C
ATOM    755  C   ILE A1099      27.695   7.748   9.184  1.00 21.84           C
ATOM    756  O   ILE A1099      27.597   7.775   7.958  1.00 24.63           O
ATOM    757  N   TRP A1100      27.334   6.699   9.907  1.00 20.85           N
ATOM    758  CA  TRP A1100      26.760   5.532   9.270  1.00 19.86           C
ATOM    759  CB  TRP A1100      27.172   4.260  10.009  1.00 18.86           C
ATOM    760  CG  TRP A1100      28.652   4.007   9.945  1.00 19.33           C
ATOM    761  CD2 TRP A1100      29.370   3.395   8.864  1.00 20.59           C
ATOM    762  CE2 TRP A1100      30.743   3.416   9.209  1.00 20.05           C
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ATOM    763  CE3 TRP A1100      28.987   2.835   7.634  1.00 19.76           C
ATOM    764  CD1 TRP A1100      29.590   4.362  10.873  1.00 19.35           C
ATOM    765  NE1 TRP A1100      30.846   4.010  10.439  1.00 18.87           N
ATOM    766  CZ2 TRP A1100      31.739   2.895   8.369  1.00 19.48           C
ATOM    767  CZ3 TRP A1100      29.978   2.317   6.796  1.00 22.42           C
ATOM    768  CH2 TRP A1100      31.343   2.354   7.172  1.00 20.56           C
ATOM    769  C   TRP A1100      25.251   5.718   9.294  1.00 20.31           C
ATOM    770  O   TRP A1100      24.633   5.795  10.357  1.00 20.18           O
ATOM    771  N   LEU A1101      24.663   5.829   8.113  1.00 18.06           N
ATOM    772  CA  LEU A1101      23.229   6.023   8.019  1.00 17.46           C
ATOM    773  CB  LEU A1101      22.915   7.399   7.409  1.00 15.91           C
ATOM    774  CG  LEU A1101      21.475   7.611   6.919  1.00 15.54           C
ATOM    775  CD1 LEU A1101      20.510   7.621   8.101  1.00 14.01           C
ATOM    776  CD2 LEU A1101      21.380   8.931   6.150  1.00 12.69           C
ATOM    777  C   LEU A1101      22.561   4.945   7.190  1.00 17.42           C
ATOM    778  O   LEU A1101      23.124   4.436   6.218  1.00 15.25           O
ATOM    779  N   SER A1102      21.353   4.582   7.600  1.00 17.54           N
ATOM    780  CA  SER A1102      20.581   3.607   6.865  1.00 15.75           C
ATOM    781  CB  SER A1102      20.832   2.189   7.364  1.00 16.41           C
ATOM    782  OG  SER A1102      20.242   1.258   6.469  1.00 14.51           O
ATOM    783  C   SER A1102      19.129   3.980   7.063  1.00 17.48           C
ATOM    784  O   SER A1102      18.711   4.322   8.173  1.00 16.20           O
ATOM    785  N   ILE A1103      18.376   3.940   5.968  1.00 17.02           N
ATOM    786  CA  ILE A1103      16.963   4.274   5.979  1.00 17.85           C
ATOM    787  CB  ILE A1103      16.691   5.576   5.194  1.00 19.00           C
ATOM    788  CG2 ILE A1103      15.207   5.948   5.278  1.00 18.57           C
ATOM    789  CG1 ILE A1103      17.554   6.706   5.754  1.00 18.22           C
ATOM    790  CD1 ILE A1103      17.414   8.014   4.999  1.00 20.97           C
ATOM    791  C   ILE A1103      16.239   3.130   5.291  1.00 17.46           C
ATOM    792  O   ILE A1103      16.769   2.510   4.368  1.00 17.27           O
ATOM    793  N   SER A1104      15.033   2.845   5.751  1.00 14.92           N
ATOM    794  CA  SER A1104      14.240   1.772   5.175  1.00 17.06           C
ATOM    795  CB  SER A1104      14.566   0.447   5.876  1.00 15.94           C
ATOM    796  OG  SER A1104      13.790  -0.613   5.342  1.00 15.77           O
ATOM    797  C   SER A1104      12.779   2.155   5.384  1.00 17.20           C
ATOM    798  O   SER A1104      12.453   2.859   6.333  1.00 15.90           O
ATOM    799  N   HIS A1105      11.902   1.699   4.502  1.00 18.52           N
ATOM    800  CA  HIS A1105      10.494   2.048   4.619  1.00 20.22           C
ATOM    801  CB  HIS A1105      10.199   3.316   3.813  1.00 23.50           C
ATOM    802  CG  HIS A1105      10.358   3.127   2.334  1.00 25.77           C
ATOM    803  CD2 HIS A1105       9.487   2.690   1.392  1.00 26.90           C
ATOM    804  ND1 HIS A1105      11.563   3.301   1.687  1.00 26.39           N
ATOM    805  CE1 HIS A1105      11.428   2.977   0.412  1.00 27.48           C
ATOM    806  NE2 HIS A1105      10.177   2.601   0.208  1.00 27.67           N
ATOM    807  C   HIS A1105       9.597   0.953   4.079  1.00 21.15           C
ATOM    808  O   HIS A1105      10.054   0.040   3.392  1.00 21.16           O
ATOM    809  N   THR A1106       8.313   1.067   4.402  1.00 21.46           N
ATOM    810  CA  THR A1106       7.290   0.160   3.911  1.00 22.28           C
ATOM    811  CB  THR A1106       6.646  -0.682   5.032  1.00 21.51           C
ATOM    812  OG1 THR A1106       5.891   0.169   5.904  1.00 19.68           O
ATOM    813  CG2 THR A1106       7.716  -1.415   5.827  1.00 21.79           C
ATOM    814  C   THR A1106       6.263   1.161   3.386  1.00 24.40           C
ATOM    815  O   THR A1106       6.560   2.356   3.309  1.00 22.60           O
ATOM    816  N   ASP A1107       5.070   0.698   3.032  1.00 25.68           N
ATOM    817  CA  ASP A1107       4.050   1.612   2.534  1.00 28.90           C
ATOM    818  CB  ASP A1107       2.952   0.845   1.787  1.00 34.46           C
ATOM    819  CG  ASP A1107       3.479   0.098   0.574  1.00 40.33           C
ATOM    820   OD1  ASP A1107        4.229    0.704   -0.225   1.00 43.51             O
ATOM    821   OD2  ASP A1107        3.134   -1.093    0.413   1.00 43.99             O
ATOM    822   C    ASP A1107        3.420    2.385    3.691   1.00 28.81             C
ATOM    823   O    ASP A1107        2.613    3.285    3.470   1.00 29.78             O
ATOM    824   N    GLN A1108        3.801    2.049    4.921   1.00 25.83             N
ATOM    825   CA   GLN A1108        3.228    2.710    6.086   1.00 24.71             C
ATOM    826   CB   GLN A1108        2.384    1.710    6.867   1.00 27.32             C
ATOM    827   CG   GLN A1108        1.328    1.026    6.030   1.00 32.60             C
ATOM    828   CD   GLN A1108        0.951   -0.324    6.583   1.00 35.93             C
ATOM    829   OE1  GLN A1108        1.085   -1.344    5.902   1.00 37.52             O
ATOM    830   NE2  GLN A1108        0.481   -0.346    7.829   1.00 36.07             N
ATOM    831   C    GLN A1108        4.224    3.356    7.038   1.00 24.10             C
ATOM    832   O    GLN A1108        3.879    4.305    7.742   1.00 23.70             O
ATOM    833   N    PHE A1109        5.448    2.840    7.082   1.00 22.72             N
ATOM    834   CA   PHE A1109        6.452    3.389    7.983   1.00 21.31             C
ATOM    835   CB   PHE A1109        6.719    2.446    9.164   1.00 22.89             C
ATOM    836   CG   PHE A1109        5.518    2.151   10.004   1.00 25.18             C
ATOM    837   CD1  PHE A1109        4.746    1.018    9.763   1.00 26.55             C
ATOM    838   CD2  PHE A1109        5.155    3.003   11.044   1.00 26.19             C
ATOM    839   CE1  PHE A1109        3.626    0.734   10.549   1.00 26.78             C
ATOM    840   CE2  PHE A1109        4.037    2.729   11.834   1.00 26.65             C
ATOM    841   CZ   PHE A1109        3.273    1.591   11.584   1.00 25.88             C
ATOM    842   C    PHE A1109        7.785    3.630    7.318   1.00 20.22             C
ATOM    843   O    PHE A1109        8.096    3.053    6.275   1.00 19.27             O
ATOM    844   N    VAL A1110        8.573    4.489    7.951   1.00 18.43             N
ATOM    845   CA   VAL A1110        9.925    4.781    7.507   1.00 19.10             C
ATOM    846   CB   VAL A1110       10.049    6.191    6.846   1.00 19.04             C
ATOM    847   CG1  VAL A1110        9.654    7.277    7.820   1.00 19.30             C
ATOM    848   CG2  VAL A1110       11.474    6.412    6.359   1.00 23.53             C
ATOM    849   C    VAL A1110       10.744    4.718    8.797   1.00 19.12             C
ATOM    850   O    VAL A1110       10.287    5.169    9.854   1.00 17.72             O
ATOM    851   N    THR A1111       11.925    4.115    8.720   1.00 18.67             N
ATOM    852   CA   THR A1111       12.805    3.992    9.875   1.00 20.42             C
ATOM    853   CB   THR A1111       12.897    2.525   10.397   1.00 22.98             C
ATOM    854   OG1  THR A1111       13.363    1.670    9.345   1.00 25.86             O
ATOM    855   CG2  THR A1111       11.548    2.029   10.874   1.00 24.99             C
ATOM    856   C    THR A1111       14.200    4.421    9.456   1.00 20.11             C
ATOM    857   O    THR A1111       14.575    4.287    8.291   1.00 20.53             O
ATOM    858   N    ALA A1112       14.962    4.946   10.404   1.00 17.15             N
ATOM    859   CA   ALA A1112       16.321    5.370   10.119   1.00 18.28             C
ATOM    860   CB   ALA A1112       16.357    6.858    9.791   1.00 16.81             C
ATOM    861   C    ALA A1112       17.190    5.080   11.328   1.00 18.04             C
ATOM    862   O    ALA A1112       16.721    5.142   12.464   1.00 17.37             O
ATOM    863   N    SER A1113       18.454    4.755   11.075   1.00 17.48             N
ATOM    864   CA   SER A1113       19.401    4.479   12.146   1.00 17.23             C
ATOM    865   CB   SER A1113       19.635    2.967   12.283   1.00 15.09             C
ATOM    866   OG   SER A1113       20.666    2.686   13.224   1.00 16.24             O
ATOM    867   C    SER A1113       20.718    5.187   11.844   1.00 17.94             C
ATOM    868   O    SER A1113       21.209    5.158   10.712   1.00 18.05             O
ATOM    869   N    VAL A1114       21.285    5.832   12.857   1.00 18.42             N
ATOM    870   CA   VAL A1114       22.546    6.543   12.683   1.00 17.97             C
ATOM    871   CB   VAL A1114       22.350    8.082   12.783   1.00 17.35             C
ATOM    872   CG1  VAL A1114       23.708    8.784   12.874   1.00 15.58             C
ATOM    873   CG2  VAL A1114       21.571    8.592   11.571   1.00 16.65             C
ATOM    874   C    VAL A1114       23.565    6.130   13.735   1.00 18.00             C
ATOM    875   O    VAL A1114       23.241    6.023   14.926   1.00 17.56             O
ATOM    876   N    ILE A1115       24.793    5.885   13.286   1.00 17.57             N
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ATOM    877  CA  ILE A1115      25.885   5.536  14.181  1.00 15.61           C
ATOM    878  CB  ILE A1115      26.416   4.109  13.951  1.00 17.48           C
ATOM    879  CG2 ILE A1115      27.514   3.806  14.965  1.00 14.97           C
ATOM    880  CG1 ILE A1115      25.287   3.086  14.082  1.00 16.92           C
ATOM    881  CD1 ILE A1115      25.695   1.685  13.638  1.00 16.69           C
ATOM    882  C   ILE A1115      27.019   6.499  13.860  1.00 17.74           C
ATOM    883  O   ILE A1115      27.470   6.573  12.714  1.00 16.21           O
ATOM    884  N   LEU A1116      27.470   7.246  14.864  1.00 17.78           N
ATOM    885  CA  LEU A1116      28.562   8.188  14.668  1.00 19.32           C
ATOM    886  CB  LEU A1116      28.333   9.442  15.510  1.00 20.38           C
ATOM    887  CG  LEU A1116      26.963  10.095  15.322  1.00 20.47           C
ATOM    888  CD1 LEU A1116      26.877  11.326  16.205  1.00 22.94           C
ATOM    889  CD2 LEU A1116      26.751  10.462  13.860  1.00 18.60           C
ATOM    890  C   LEU A1116      29.851   7.490  15.093  1.00 21.10           C
ATOM    891  O   LEU A1116      29.909   6.870  16.156  1.00 19.16           O
ATOM    892  N   GLU A1117      30.880   7.590  14.259  1.00 22.54           N
ATOM    893  CA  GLU A1117      32.141   6.934  14.554  1.00 25.40           C
ATOM    894  CB  GLU A1117      32.323   5.743  13.616  1.00 25.16           C
ATOM    895  CG  GLU A1117      33.629   5.000  13.817  1.00 27.61           C
ATOM    896  CD  GLU A1117      33.720   3.772  12.950  1.00 27.04           C
ATOM    897  OE1 GLU A1117      33.391   3.875  11.750  1.00 27.90           O
ATOM    898  OE2 GLU A1117      34.126   2.712  13.465  1.00 27.49           O
ATOM    899  C   GLU A1117      33.358   7.852  14.464  1.00 27.82           C
ATOM    900  O   GLU A1117      33.425   8.742  13.616  1.00 26.44           O
ATOM    901  N   GLU A1118      34.328   7.605  15.339  1.00 31.38           N
ATOM    902  CA  GLU A1118      35.549   8.396  15.387  1.00 35.38           C
ATOM    903  CB  GLU A1118      35.632   9.122  16.732  1.00 38.96           C
ATOM    904  CG  GLU A1118      36.450  10.397  16.711  1.00 44.28           C
ATOM    905  CD  GLU A1118      35.953  11.381  15.671  1.00 46.94           C
ATOM    906  OE1 GLU A1118      36.206  11.153  14.469  1.00 47.99           O
ATOM    907  OE2 GLU A1118      35.302  12.377  16.054  1.00 49.20           O
ATOM    908  C   GLU A1118      36.756   7.482  15.210  1.00 36.85           C
ATOM    909  O   GLU A1118      37.586   7.767  14.319  1.00 39.18           O
ATOM    910  OXT GLU A1118      36.858   6.488  15.967  1.00 37.85           O
TER     911      GLU A1118
ATOM    912  CB  MET B2003      36.089  -4.001  20.131  1.00 36.93           C
ATOM    913  CG  MET B2003      35.997  -4.450  21.581  1.00 42.07           C
ATOM    914  SD  MET B2003      37.062  -5.865  21.964  1.00 49.34           S
ATOM    915  CE  MET B2003      36.267  -7.158  21.006  1.00 46.76           C
ATOM    916  C   MET B2003      33.796  -3.017  20.233  1.00 31.67           C
ATOM    917  O   MET B2003      33.469  -2.921  21.422  1.00 28.54           O
ATOM    918  N   MET B2003      35.809  -1.560  20.439  1.00 33.64           N
ATOM    919  CA  MET B2003      35.239  -2.773  19.791  1.00 33.04           C
ATOM    920  N   ILE B2004      32.938  -3.327  19.264  1.00 29.22           N
ATOM    921  CA  ILE B2004      31.537  -3.604  19.538  1.00 26.95           C
ATOM    922  CB  ILE B2004      30.694  -3.586  18.236  1.00 27.19           C
ATOM    923  CG2 ILE B2004      29.273  -4.070  18.528  1.00 26.67           C
ATOM    924  CG1 ILE B2004      30.692  -2.175  17.642  1.00 27.75           C
ATOM    925  CD1 ILE B2004      29.965  -2.048  16.307  1.00 28.82           C
ATOM    926  C   ILE B2004      31.452  -4.986  20.165  1.00 25.64           C
ATOM    927  O   ILE B2004      32.092  -5.924  19.693  1.00 26.78           O
ATOM    928  N   VAL B2005      30.681  -5.114  21.240  1.00 23.42           N
ATOM    929  CA  VAL B2005      30.534  -6.406  21.904  1.00 22.67           C
ATOM    930  CB  VAL B2005      31.099  -6.379  23.344  1.00 23.16           C
ATOM    931  CG1 VAL B2005      32.615  -6.311  23.305  1.00 22.80           C
ATOM    932  CG2 VAL B2005      30.552  -5.197  24.096  1.00 23.38           C
ATOM    933  C   VAL B2005      29.086  -6.878  21.948  1.00 21.18           C
ATOM    934  O   VAL B2005      28.772  -7.884  22.577  1.00 23.33           O
ATOM    935  N   GLY B2006      28.200  -6.155  21.275  1.00 19.21           N
ATOM    936  CA  GLY B2006      26.811  -6.568  21.260  1.00 17.80           C
ATOM    937  C   GLY B2006      25.896  -5.584  20.567  1.00 17.03           C
ATOM    938  O   GLY B2006      26.161  -4.387  20.553  1.00 16.68           O
ATOM    939  N   HIS B2007      24.813  -6.093  19.989  1.00 16.35           N
ATOM    940  CA  HIS B2007      23.846  -5.237  19.323  1.00 16.88           C
ATOM    941  CB  HIS B2007      24.216  -5.042  17.847  1.00 17.35           C
ATOM    942  CG  HIS B2007      23.254  -4.170  17.097  1.00 18.35           C
ATOM    943  CD2 HIS B2007      22.786  -4.239  15.827  1.00 17.84           C
ATOM    944  ND1 HIS B2007      22.668  -3.058  17.660  1.00 18.04           N
ATOM    945  CE1 HIS B2007      21.880  -2.479  16.769  1.00 19.69           C
ATOM    946  NE2 HIS B2007      21.934  -3.176  15.648  1.00 16.84           N
ATOM    947  C   HIS B2007      22.447  -5.831  19.444  1.00 17.26           C
ATOM    948  O   HIS B2007      22.238  -7.027  19.213  1.00 14.74           O
ATOM    949  N   GLY B2008      21.490  -4.990  19.819  1.00 16.95           N
ATOM    950  CA  GLY B2008      20.129  -5.464  19.962  1.00 17.68           C
ATOM    951  C   GLY B2008      19.095  -4.401  19.661  1.00 18.32           C
ATOM    952  O   GLY B2008      19.321  -3.212  19.901  1.00 19.75           O
ATOM    953  N   ILE B2009      17.964  -4.830  19.112  1.00 17.31           N
ATOM    954  CA  ILE B2009      16.868  -3.917  18.821  1.00 18.07           C
ATOM    955  CB  ILE B2009      16.727  -3.598  17.306  1.00 16.33           C
ATOM    956  CG2 ILE B2009      18.025  -2.990  16.777  1.00 16.15           C
ATOM    957  CG1 ILE B2009      16.361  -4.856  16.519  1.00 19.06           C
ATOM    958  CD1 ILE B2009      16.014  -4.559  15.060  1.00 16.01           C
ATOM    959  C   ILE B2009      15.607  -4.607  19.312  1.00 17.52           C
ATOM    960  O   ILE B2009      15.576  -5.827  19.448  1.00 17.73           O
ATOM    961  N   ASP B2010      14.580  -3.825  19.607  1.00 18.54           N
ATOM    962  CA  ASP B2010      13.327  -4.384  20.089  1.00 20.76           C
ATOM    963  CB  ASP B2010      13.401  -4.663  21.598  1.00 21.38           C
ATOM    964  CG  ASP B2010      12.157  -5.372  22.127  1.00 22.62           C
ATOM    965  OD1 ASP B2010      11.403  -4.762  22.915  1.00 22.62           O
ATOM    966  OD2 ASP B2010      11.932  -6.544  21.756  1.00 23.17           O
ATOM    967  C   ASP B2010      12.198  -3.416  19.814  1.00 21.83           C
ATOM    968  O   ASP B2010      12.378  -2.200  19.912  1.00 21.02           O
ATOM    969  N   ILE B2011      11.039  -3.966  19.464  1.00 21.90           N
ATOM    970  CA  ILE B2011       9.848  -3.163  19.189  1.00 25.52           C
ATOM    971  CB  ILE B2011       9.346  -3.346  17.752  1.00 27.88           C
ATOM    972  CG2 ILE B2011       8.410  -2.194  17.388  1.00 30.28           C
ATOM    973  CG1 ILE B2011      10.518  -3.410  16.783  1.00 29.66           C
ATOM    974  CD1 ILE B2011      10.131  -3.937  15.420  1.00 31.53           C
ATOM    975  C   ILE B2011       8.738  -3.670  20.102  1.00 24.08           C
ATOM    976  O   ILE B2011       8.561  -4.874  20.258  1.00 22.40           O
ATOM    977  N   GLU B2012       8.002  -2.757  20.718  1.00 24.39           N
ATOM    978  CA  GLU B2012       6.911  -3.156  21.598  1.00 24.77           C
ATOM    979  CB  GLU B2012       7.269  -2.868  23.056  1.00 25.42           C
ATOM    980  CG  GLU B2012       8.482  -3.637  23.554  1.00 28.89           C
ATOM    981  CD  GLU B2012       8.233  -5.139  23.652  1.00 31.05           C
ATOM    982  OE1 GLU B2012       9.224  -5.895  23.721  1.00 31.07           O
ATOM    983  OE2 GLU B2012       7.053  -5.560  23.671  1.00 30.63           O
ATOM    984  C   GLU B2012       5.655  -2.387  21.208  1.00 24.28           C
ATOM    985  O   GLU B2012       5.732  -1.235  20.786  1.00 24.45           O
ATOM    986  N   GLU B2013       4.507  -3.043  21.328  1.00 22.06           N
ATOM    987  CA  GLU B2013       3.223  -2.431  21.008  1.00 21.01           C
ATOM    988  CB  GLU B2013       2.241  -3.508  20.545  1.00 21.98           C
ATOM    989  CG  GLU B2013       0.857  -3.010  20.179  0.05 20.80           C
ATOM    990  CD  GLU B2013      -0.106  -4.152  19.921  0.05 20.56           C
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ATOM    991  OE1 GLU B2013       0.231  -5.039  19.109  0.05 20.26          O
ATOM    992  OE2 GLU B2013      -1.196  -4.166  20.529  0.05 20.00          O
ATOM    993  C   GLU B2013       2.719  -1.793  22.292  1.00 20.42          C
ATOM    994  O   GLU B2013       2.644  -2.457  23.326  1.00 19.82          O
ATOM    995  N   LEU B2014       2.383  -0.512  22.244  1.00 20.95          N
ATOM    996  CA  LEU B2014       1.906   0.149  23.452  1.00 25.05          C
ATOM    997  CB  LEU B2014       1.530   1.604  23.162  1.00 26.46          C
ATOM    998  CG  LEU B2014       2.610   2.478  22.521  1.00 29.15          C
ATOM    999  CD1 LEU B2014       2.171   3.929  22.610  1.00 32.28          C
ATOM   1000  CD2 LEU B2014       3.945   2.294  23.225  1.00 28.39          C
ATOM   1001  C   LEU B2014       0.708  -0.582  24.053  1.00 25.52          C
ATOM   1002  O   LEU B2014       0.635  -0.773  25.266  1.00 25.48          O
ATOM   1003  N   ALA B2015      -0.220  -1.001  23.196  1.00 26.92          N
ATOM   1004  CA  ALA B2015      -1.425  -1.697  23.637  1.00 28.21          C
ATOM   1005  CB  ALA B2015      -2.267  -2.088  22.426  1.00 29.71          C
ATOM   1006  C   ALA B2015      -1.144  -2.932  24.490  1.00 29.10          C
ATOM   1007  O   ALA B2015      -1.864  -3.208  25.450  1.00 29.79          O
ATOM   1008  N   SER B2016      -0.106  -3.681  24.135  1.00 29.36          N
ATOM   1009  CA  SER B2016       0.246  -4.885  24.875  1.00 30.31          C
ATOM   1010  CB  SER B2016       1.357  -5.633  24.147  1.00 32.28          C
ATOM   1011  OG  SER B2016       1.032  -5.782  22.779  1.00 33.64          O
ATOM   1012  C   SER B2016       0.705  -4.508  26.275  1.00 30.37          C
ATOM   1013  O   SER B2016       0.369  -5.170  27.260  1.00 29.37          O
ATOM   1014  N   ILE B2017       1.476  -3.431  26.353  1.00 30.04          N
ATOM   1015  CA  ILE B2017       1.979  -2.955  27.625  1.00 30.17          C
ATOM   1016  CB  ILE B2017       2.907  -1.741  27.420  1.00 29.67          C
ATOM   1017  CG2 ILE B2017       3.323  -1.153  28.765  1.00 31.54          C
ATOM   1018  CG1 ILE B2017       4.141  -2.178  26.630  1.00 29.63          C
ATOM   1019  CD1 ILE B2017       4.883  -3.368  27.246  1.00 29.53          C
ATOM   1020  C   ILE B2017       0.814  -2.585  28.537  1.00 30.53          C
ATOM   1021  O   ILE B2017       0.736  -3.051  29.673  1.00 29.90          O
ATOM   1022  N   GLU B2018      -0.100  -1.762  28.034  1.00 31.91          N
ATOM   1023  CA  GLU B2018      -1.252  -1.363  28.831  1.00 34.92          C
ATOM   1024  CB  GLU B2018      -2.113  -0.355  28.064  1.00 37.97          C
ATOM   1025  CG  GLU B2018      -1.895  -0.370  26.565  1.00 42.86          C
ATOM   1026  CD  GLU B2018      -2.698   0.700  25.844  1.00 45.97          C
ATOM   1027  OE1 GLU B2018      -3.945   0.608  25.843  1.00 47.86          O
ATOM   1028  OE2 GLU B2018      -2.084   1.633  25.279  1.00 47.02          O
ATOM   1029  C   GLU B2018      -2.085  -2.573  29.247  1.00 34.56          C
ATOM   1030  O   GLU B2018      -2.490  -2.678  30.404  1.00 35.89          O
ATOM   1031  N   SER B2019      -2.349  -3.488  28.321  1.00 33.29          N
ATOM   1032  CA  SER B2019      -3.117  -4.674  28.681  1.00 33.75          C
ATOM   1033  CB  SER B2019      -3.270  -5.623  27.490  1.00 32.73          C
ATOM   1034  OG  SER B2019      -4.314  -5.203  26.635  1.00 36.89          O
ATOM   1035  C   SER B2019      -2.416  -5.402  29.822  1.00 33.12          C
ATOM   1036  O   SER B2019      -3.066  -5.963  30.698  1.00 32.83          O
ATOM   1037  N   ALA B2020      -1.087  -5.398  29.808  1.00 33.22          N
ATOM   1038  CA  ALA B2020      -0.329  -6.055  30.869  1.00 35.36          C
ATOM   1039  CB  ALA B2020       1.157  -6.105  30.510  1.00 34.87          C
ATOM   1040  C   ALA B2020      -0.537  -5.295  32.179  1.00 36.08          C
ATOM   1041  O   ALA B2020      -0.669  -5.898  33.241  1.00 34.70          O
ATOM   1042  N   VAL B2021      -0.570  -3.968  32.097  1.00 38.89          N
ATOM   1043  CA  VAL B2021      -0.783  -3.133  33.277  1.00 42.15          C
ATOM   1044  CB  VAL B2021      -0.672  -1.627  32.931  1.00 42.05          C
ATOM   1045  CG1 VAL B2021      -1.060  -0.775  34.138  1.00 42.48          C
ATOM   1046  CG2 VAL B2021       0.746  -1.298  32.504  1.00 42.42          C
ATOM   1047  C   VAL B2021      -2.176  -3.410  33.841  1.00 44.98          C
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ATOM   1048  O   VAL B2021      -2.491  -3.029  34.967  1.00 45.67           O
ATOM   1049  N   THR B2022      -3.001  -4.085  33.047  1.00 47.50           N
ATOM   1050  CA  THR B2022      -4.359  -4.420  33.451  1.00 50.10           C
ATOM   1051  CB  THR B2022      -5.323  -4.368  32.236  1.00 51.16           C
ATOM   1052  OG1 THR B2022      -5.501  -3.007  31.824  1.00 53.24           O
ATOM   1053  CG2 THR B2022      -6.677  -4.957  32.592  1.00 52.95           C
ATOM   1054  C   THR B2022      -4.454  -5.799  34.109  1.00 50.81           C
ATOM   1055  O   THR B2022      -4.937  -5.918  35.232  1.00 51.36           O
ATOM   1056  N   ARG B2023      -3.988  -6.836  33.421  1.00 51.25           N
ATOM   1057  CA  ARG B2023      -4.064  -8.187  33.968  1.00 52.22           C
ATOM   1058  CB  ARG B2023      -3.746  -9.220  32.883  1.00 52.29           C
ATOM   1059  CG  ARG B2023      -4.157 -10.644  33.242  0.05 51.97           C
ATOM   1060  CD  ARG B2023      -5.531 -10.663  33.905  0.05 51.83           C
ATOM   1061  NE  ARG B2023      -6.183 -11.966  33.828  0.05 51.66           N
ATOM   1062  CZ  ARG B2023      -6.697 -12.474  32.713  0.05 51.57           C
ATOM   1063  NH1 ARG B2023      -6.634 -11.789  31.579  0.05 51.47           N
ATOM   1064  NH2 ARG B2023      -7.284 -13.663  32.730  0.05 51.49           N
ATOM   1065  C   ARG B2023      -3.157  -8.405  35.173  1.00 53.22           C
ATOM   1066  O   ARG B2023      -3.256  -9.424  35.859  1.00 53.07           O
ATOM   1067  N   HIS B2024      -2.274  -7.447  35.432  1.00 53.34           N
ATOM   1068  CA  HIS B2024      -1.365  -7.544  36.564  1.00 53.62           C
ATOM   1069  CB  HIS B2024      -0.042  -8.176  36.127  1.00 54.97           C
ATOM   1070  CG  HIS B2024      -0.208  -9.477  35.403  1.00 56.91           C
ATOM   1071  CD2 HIS B2024      -0.006 -10.755  35.805  1.00 57.80           C
ATOM   1072  ND1 HIS B2024      -0.660  -9.552  34.103  1.00 57.75           N
ATOM   1073  CE1 HIS B2024      -0.729 -10.820  33.735  1.00 58.06           C
ATOM   1074  NE2 HIS B2024      -0.338 -11.570  34.750  1.00 57.59           N
ATOM   1075  C   HIS B2024      -1.127  -6.157  37.148  1.00 53.35           C
ATOM   1076  O   HIS B2024      -0.312  -5.385  36.644  1.00 53.29           O
ATOM   1077  N   GLU B2025      -1.861  -5.854  38.214  1.00 52.80           N
ATOM   1078  CA  GLU B2025      -1.785  -4.569  38.905  1.00 51.46           C
ATOM   1079  CB  GLU B2025      -2.618  -4.637  40.188  1.00 54.49           C
ATOM   1080  CG  GLU B2025      -4.095  -4.920  39.949  1.00 56.85           C
ATOM   1081  CD  GLU B2025      -4.798  -5.434  41.190  1.00 58.84           C
ATOM   1082  OE1 GLU B2025      -4.520  -6.584  41.595  1.00 60.08           O
ATOM   1083  OE2 GLU B2025      -5.624  -4.690  41.763  1.00 59.42           O
ATOM   1084  C   GLU B2025      -0.364  -4.122  39.247  1.00 48.83           C
ATOM   1085  O   GLU B2025      -0.058  -2.931  39.211  1.00 48.34           O
ATOM   1086  N   GLY B2026       0.497  -5.074  39.588  1.00 45.49           N
ATOM   1087  CA  GLY B2026       1.864  -4.729  39.932  1.00 40.95           C
ATOM   1088  C   GLY B2026       2.826  -4.920  38.774  1.00 37.63           C
ATOM   1089  O   GLY B2026       4.027  -5.077  38.978  1.00 37.06           O
ATOM   1090  N   PHE B2027       2.301  -4.902  37.554  1.00 33.22           N
ATOM   1091  CA  PHE B2027       3.135  -5.083  36.374  1.00 30.35           C
ATOM   1092  CB  PHE B2027       2.287  -4.995  35.105  1.00 29.47           C
ATOM   1093  CG  PHE B2027       3.079  -5.162  33.840  1.00 28.37           C
ATOM   1094  CD1 PHE B2027       3.501  -6.421  33.431  1.00 28.75           C
ATOM   1095  CD2 PHE B2027       3.432  -4.055  33.076  1.00 26.82           C
ATOM   1096  CE1 PHE B2027       4.264  -6.575  32.277  1.00 27.85           C
ATOM   1097  CE2 PHE B2027       4.195  -4.199  31.919  1.00 27.50           C
ATOM   1098  CZ  PHE B2027       4.611  -5.458  31.520  1.00 28.11           C
ATOM   1099  C   PHE B2027       4.245  -4.038  36.303  1.00 28.35           C
ATOM   1100  O   PHE B2027       5.419  -4.378  36.179  1.00 27.55           O
ATOM   1101  N   ALA B2028       3.863  -2.768  36.376  1.00 26.54           N
ATOM   1102  CA  ALA B2028       4.820  -1.674  36.306  1.00 26.97           C
ATOM   1103  CB  ALA B2028       4.103  -0.340  36.503  1.00 26.06           C
ATOM   1104  C   ALA B2028       5.938  -1.815  37.329  1.00 27.20           C
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ATOM   1105  O   ALA B2028       7.112  -1.697  36.998  1.00 26.33           O
ATOM   1106  N   LYS B2029       5.555  -2.075  38.572  1.00 28.14           N
ATOM   1107  CA  LYS B2029       6.496  -2.213  39.673  1.00 30.24           C
ATOM   1108  CB  LYS B2029       5.738  -2.543  40.965  1.00 33.94           C
ATOM   1109  CG  LYS B2029       6.597  -2.502  42.215  1.00 39.10           C
ATOM   1110  CD  LYS B2029       7.038  -1.082  42.540  1.00 42.39           C
ATOM   1111  CE  LYS B2029       8.108  -1.070  43.629  1.00 45.14           C
ATOM   1112  NZ  LYS B2029       7.712  -1.858  44.836  1.00 46.16           N
ATOM   1113  C   LYS B2029       7.567  -3.264  39.437  1.00 28.56           C
ATOM   1114  O   LYS B2029       8.696  -3.114  39.902  1.00 28.42           O
ATOM   1115  N   ARG B2030       7.219  -4.325  38.717  1.00 26.96           N
ATOM   1116  CA  ARG B2030       8.171  -5.397  38.452  1.00 25.76           C
ATOM   1117  CB  ARG B2030       7.430  -6.708  38.180  1.00 27.87           C
ATOM   1118  CG  ARG B2030       6.318  -7.007  39.174  0.05 26.73           C
ATOM   1119  CD  ARG B2030       6.358  -8.451  39.652  0.05 26.68           C
ATOM   1120  NE  ARG B2030       6.295  -9.416  38.557  0.05 26.45           N
ATOM   1121  CZ  ARG B2030       5.263  -9.553  37.730  0.05 26.36           C
ATOM   1122  NH1 ARG B2030       4.191  -8.783  37.862  0.05 26.22           N
ATOM   1123  NH2 ARG B2030       5.301 -10.469  36.771  0.05 26.29           N
ATOM   1124  C   ARG B2030       9.069  -5.076  37.266  1.00 24.16           C
ATOM   1125  O   ARG B2030      10.200  -5.551  37.187  1.00 22.83           O
ATOM   1126  N   VAL B2031       8.559  -4.270  36.341  1.00 22.75           N
ATOM   1127  CA  VAL B2031       9.319  -3.903  35.158  1.00 22.54           C
ATOM   1128  CB  VAL B2031       8.371  -3.536  33.984  1.00 23.94           C
ATOM   1129  CG1 VAL B2031       9.156  -2.884  32.855  1.00 24.54           C
ATOM   1130  CG2 VAL B2031       7.677  -4.794  33.467  1.00 24.38           C
ATOM   1131  C   VAL B2031      10.264  -2.739  35.409  1.00 21.20           C
ATOM   1132  O   VAL B2031      11.364  -2.699  34.858  1.00 21.89           O
ATOM   1133  N   LEU B2032       9.837  -1.805  36.252  1.00 20.43           N
ATOM   1134  CA  LEU B2032      10.623  -0.607  36.552  1.00 21.46           C
ATOM   1135  CB  LEU B2032       9.722   0.624  36.459  1.00 21.16           C
ATOM   1136  CG  LEU B2032       8.902   0.814  35.180  1.00 22.44           C
ATOM   1137  CD1 LEU B2032       7.913   1.951  35.383  1.00 25.05           C
ATOM   1138  CD2 LEU B2032       9.822   1.107  34.003  1.00 23.51           C
ATOM   1139  C   LEU B2032      11.289  -0.613  37.928  1.00 20.88           C
ATOM   1140  O   LEU B2032      10.758  -1.188  38.875  1.00 24.06           O
ATOM   1141  N   THR B2033      12.451   0.027  38.035  1.00 20.86           N
ATOM   1142  CA  THR B2033      13.147   0.117  39.317  1.00 20.81           C
ATOM   1143  CB  THR B2033      14.602   0.569  39.160  1.00 20.39           C
ATOM   1144  OG1 THR B2033      14.623   1.853  38.521  1.00 21.21           O
ATOM   1145  CG2 THR B2033      15.394  -0.443  38.341  1.00 20.57           C
ATOM   1146  C   THR B2033      12.432   1.189  40.119  1.00 21.74           C
ATOM   1147  O   THR B2033      11.479   1.806  39.635  1.00 22.52           O
ATOM   1148  N   ALA B2034      12.893   1.427  41.339  1.00 22.64           N
ATOM   1149  CA  ALA B2034      12.267   2.441  42.177  1.00 24.18           C
ATOM   1150  CB  ALA B2034      12.939   2.479  43.541  1.00 24.55           C
ATOM   1151  C   ALA B2034      12.371   3.806  41.502  1.00 25.08           C
ATOM   1152  O   ALA B2034      11.393   4.555  41.437  1.00 24.57           O
ATOM   1153  N   LEU B2035      13.558   4.119  40.989  1.00 25.67           N
ATOM   1154  CA  LEU B2035      13.786   5.403  40.337  1.00 27.37           C
ATOM   1155  CB  LEU B2035      15.274   5.576  40.025  1.00 30.75           C
ATOM   1156  CG  LEU B2035      15.792   7.017  40.016  1.00 34.25           C
ATOM   1157  CD1 LEU B2035      15.529   7.681  41.373  1.00 34.25           C
ATOM   1158  CD2 LEU B2035      17.286   7.010  39.715  1.00 36.03           C
ATOM   1159  C   LEU B2035      12.948   5.550  39.066  1.00 26.19           C
ATOM   1160  O   LEU B2035      12.424   6.625  38.789  1.00 25.81           O
ATOM   1161  N   GLU B2036      12.829   4.479  38.288  1.00 24.86           N
ATOM   1162  CA  GLU B2036      12.010   4.523  37.074  1.00 24.94           C
ATOM   1163  CB  GLU B2036      12.218   3.256  36.238  1.00 24.20           C
ATOM   1164  CG  GLU B2036      13.521   3.220  35.439  1.00 22.34           C
ATOM   1165  CD  GLU B2036      13.823   1.834  34.878  1.00 22.43           C
ATOM   1166  OE1 GLU B2036      14.592   1.744  33.899  1.00 20.15           O
ATOM   1167  OE2 GLU B2036      13.302   0.834  35.425  1.00 21.31           O
ATOM   1168  C   GLU B2036      10.528   4.645  37.461  1.00 25.14           C
ATOM   1169  O   GLU B2036       9.740   5.261  36.746  1.00 24.49           O
ATOM   1170  N   MET B2037      10.155   4.051  38.593  1.00 25.36           N
ATOM   1171  CA  MET B2037       8.772   4.116  39.067  1.00 27.03           C
ATOM   1172  CB  MET B2037       8.570   3.202  40.279  1.00 28.19           C
ATOM   1173  CG  MET B2037       8.077   1.811  39.932  1.00 30.50           C
ATOM   1174  SD  MET B2037       6.592   1.878  38.903  1.00 35.36           S
ATOM   1175  CE  MET B2037       5.315   2.130  40.111  1.00 31.11           C
ATOM   1176  C   MET B2037       8.389   5.541  39.445  1.00 27.51           C
ATOM   1177  O   MET B2037       7.288   6.004  39.146  1.00 27.72           O
ATOM   1178  N   GLU B2038       9.309   6.232  40.104  1.00 29.26           N
ATOM   1179  CA  GLU B2038       9.075   7.604  40.522  1.00 30.50           C
ATOM   1180  CB  GLU B2038      10.261   8.089  41.363  1.00 33.66           C
ATOM   1181  CG  GLU B2038      10.100   7.747  42.852  1.00 38.27           C
ATOM   1182  CD  GLU B2038      11.384   7.278  43.517  1.00 41.20           C
ATOM   1183  OE1 GLU B2038      12.448   7.886  43.264  1.00 41.95           O
ATOM   1184  OE2 GLU B2038      11.322   6.307  44.309  1.00 42.56           O
ATOM   1185  C   GLU B2038       8.827   8.512  39.320  1.00 29.98           C
ATOM   1186  O   GLU B2038       8.059   9.473  39.403  1.00 29.40           O
ATOM   1187  N   ARG B2039       9.465   8.198  38.198  1.00 28.37           N
ATOM   1188  CA  ARG B2039       9.272   8.973  36.986  1.00 28.60           C
ATOM   1189  CB  ARG B2039      10.374   8.670  35.973  1.00 32.59           C
ATOM   1190  CG  ARG B2039      10.103   9.236  34.589  1.00 36.59           C
ATOM   1191  CD  ARG B2039       9.892  10.740  34.627  1.00 42.20           C
ATOM   1192  NE  ARG B2039       9.750  11.301  33.284  1.00 46.45           N
ATOM   1193  CZ  ARG B2039       9.599  12.597  33.025  1.00 48.88           C
ATOM   1194  NH1 ARG B2039       9.477  13.014  31.770  1.00 48.84           N
ATOM   1195  NH2 ARG B2039       9.570  13.478  34.018  1.00 49.51           N
ATOM   1196  C   ARG B2039       7.926   8.585  36.397  1.00 27.40           C
ATOM   1197  O   ARG B2039       7.107   9.439  36.047  1.00 28.21           O
ATOM   1198  N   PHE B2040       7.717   7.280  36.291  1.00 25.73           N
ATOM   1199  CA  PHE B2040       6.489   6.710  35.758  1.00 26.22           C
ATOM   1200  CB  PHE B2040       6.546   5.185  35.916  1.00 24.31           C
ATOM   1201  CG  PHE B2040       5.265   4.477  35.573  1.00 26.63           C
ATOM   1202  CD1 PHE B2040       4.871   4.318  34.248  1.00 26.24           C
ATOM   1203  CD2 PHE B2040       4.467   3.938  36.579  1.00 26.94           C
ATOM   1204  CE1 PHE B2040       3.698   3.627  33.930  1.00 27.58           C
ATOM   1205  CE2 PHE B2040       3.297   3.249  36.276  1.00 27.41           C
ATOM   1206  CZ  PHE B2040       2.911   3.090  34.950  1.00 27.69           C
ATOM   1207  C   PHE B2040       5.245   7.262  36.463  1.00 26.33           C
ATOM   1208  O   PHE B2040       4.269   7.622  35.814  1.00 27.93           O
ATOM   1209  N   THR B2041       5.287   7.324  37.792  1.00 27.19           N
ATOM   1210  CA  THR B2041       4.151   7.805  38.575  1.00 27.42           C
ATOM   1211  CB  THR B2041       4.328   7.485  40.078  1.00 27.34           C
ATOM   1212  OG1 THR B2041       5.504   8.132  40.577  1.00 28.52           O
ATOM   1213  CG2 THR B2041       4.458   5.986  40.294  1.00 28.04           C
ATOM   1214  C   THR B2041       3.896   9.304  38.432  1.00 28.31           C
ATOM   1215  O   THR B2041       2.840   9.796  38.840  1.00 27.03           O
ATOM   1216  N   SER B2042       4.854  10.024  37.853  1.00 28.11           N
ATOM   1217  CA  SER B2042       4.706  11.465  37.665  1.00 31.34           C
ATOM   1218  CB  SER B2042       6.039  12.179  37.896  1.00 32.90           C
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ATOM	1219	OG	SER	B2042	6.326	12.278	39.282	1.00	36.54	O
ATOM	1220	C	SER	B2042	4.168	11.841	36.289	1.00	31.32	C
ATOM	1221	O	SER	B2042	3.909	13.012	36.018	1.00	30.89	O
ATOM	1222	N	LEU	B2043	4.008	10.849	35.421	1.00	31.83	N
ATOM	1223	CA	LEU	B2043	3.487	11.088	34.077	1.00	31.92	C
ATOM	1224	CB	LEU	B2043	4.293	10.300	33.038	1.00	29.48	C
ATOM	1225	CG	LEU	B2043	5.785	10.603	32.912	1.00	29.62	C
ATOM	1226	CD1	LEU	B2043	6.420	9.633	31.921	1.00	29.54	C
ATOM	1227	CD2	LEU	B2043	5.985	12.035	32.462	1.00	29.33	C
ATOM	1228	C	LEU	B2043	2.039	10.623	34.058	1.00	33.01	C
ATOM	1229	O	LEU	B2043	1.569	10.030	35.026	1.00	32.48	O
ATOM	1230	N	LYS	B2044	1.337	10.877	32.957	1.00	36.01	N
ATOM	1231	CA	LYS	B2044	-0.060	10.469	32.850	1.00	38.06	C
ATOM	1232	CB	LYS	B2044	-0.967	11.586	33.375	1.00	39.86	C
ATOM	1233	CG	LYS	B2044	-2.402	11.149	33.619	1.00	43.44	C
ATOM	1234	CD	LYS	B2044	-3.295	12.317	34.013	1.00	45.82	C
ATOM	1235	CE	LYS	B2044	-4.630	11.825	34.554	1.00	46.21	C
ATOM	1236	NZ	LYS	B2044	-5.292	10.879	33.615	1.00	47.83	N
ATOM	1237	C	LYS	B2044	-0.472	10.116	31.422	1.00	38.81	C
ATOM	1238	O	LYS	B2044	0.225	10.438	30.459	1.00	39.23	O
ATOM	1239	N	GLY	B2045	-1.611	9.443	31.299	1.00	39.57	N
ATOM	1240	CA	GLY	B2045	-2.134	9.068	29.996	1.00	40.10	C
ATOM	1241	C	GLY	B2045	-1.177	8.355	29.062	1.00	40.74	C
ATOM	1242	O	GLY	B2045	-0.513	7.394	29.454	1.00	41.23	O
ATOM	1243	N	ARG	B2046	-1.115	8.832	27.820	1.00	41.17	N
ATOM	1244	CA	ARG	B2046	-0.255	8.249	26.791	1.00	41.02	C
ATOM	1245	CB	ARG	B2046	-0.396	9.015	25.472	1.00	43.31	C
ATOM	1246	CG	ARG	B2046	-1.812	9.081	24.931	1.00	47.77	C
ATOM	1247	CD	ARG	B2046	-1.882	9.873	23.627	1.00	50.51	C
ATOM	1248	NE	ARG	B2046	-3.260	10.180	23.244	1.00	52.23	N
ATOM	1249	CZ	ARG	B2046	-3.611	10.768	22.103	1.00	52.56	C
ATOM	1250	NH1	ARG	B2046	-4.890	11.012	21.844	1.00	52.50	N
ATOM	1251	NH2	ARG	B2046	-2.684	11.107	21.217	1.00	53.75	N
ATOM	1252	C	ARG	B2046	1.212	8.229	27.184	1.00	39.59	C
ATOM	1253	O	ARG	B2046	1.873	7.198	27.078	1.00	38.95	O
ATOM	1254	N	ARG	B2047	1.718	9.375	27.631	1.00	38.59	N
ATOM	1255	CA	ARG	B2047	3.117	9.492	28.022	1.00	36.93	C
ATOM	1256	CB	ARG	B2047	3.415	10.914	28.497	1.00	39.53	C
ATOM	1257	CG	ARG	B2047	3.284	11.965	27.408	1.00	43.89	C
ATOM	1258	CD	ARG	B2047	3.915	13.275	27.843	1.00	46.98	C
ATOM	1259	NE	ARG	B2047	5.322	13.091	28.189	1.00	49.81	N
ATOM	1260	CZ	ARG	B2047	6.145	14.072	28.545	1.00	50.90	C
ATOM	1261	NH1	ARG	B2047	5.708	15.324	28.603	1.00	51.65	N
ATOM	1262	NH2	ARG	B2047	7.409	13.800	28.845	1.00	52.13	N
ATOM	1263	C	ARG	B2047	3.543	8.496	29.095	1.00	34.22	C
ATOM	1264	O	ARG	B2047	4.671	8.017	29.086	1.00	33.86	O
ATOM	1265	N	GLN	B2048	2.646	8.187	30.022	1.00	31.68	N
ATOM	1266	CA	GLN	B2048	2.968	7.247	31.081	1.00	29.06	C
ATOM	1267	CB	GLN	B2048	1.844	7.212	32.121	1.00	29.98	C
ATOM	1268	CG	GLN	B2048	2.236	6.524	33.420	1.00	32.80	C
ATOM	1269	CD	GLN	B2048	1.089	6.443	34.415	1.00	34.55	C
ATOM	1270	OE1	GLN	B2048	1.297	6.158	35.596	1.00	36.97	O
ATOM	1271	NE2	GLN	B2048	-0.125	6.682	33.940	1.00	33.10	N
ATOM	1272	C	GLN	B2048	3.161	5.861	30.471	1.00	27.54	C
ATOM	1273	O	GLN	B2048	4.134	5.170	30.769	1.00	26.96	O
ATOM	1274	N	ILE	B2049	2.230	5.459	29.612	1.00	25.61	N
ATOM	1275	CA	ILE	B2049	2.318	4.159	28.961	1.00	24.60	C

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ATOM    1276  CB  ILE B2049       1.099   3.894  28.053  1.00 24.71           C
ATOM    1277  CG2 ILE B2049       1.310   2.606  27.254  1.00 25.39           C
ATOM    1278  CG1 ILE B2049      -0.174   3.814  28.906  1.00 25.99           C
ATOM    1279  CD1 ILE B2049      -0.111   2.776  30.004  1.00 26.01           C
ATOM    1280  C   ILE B2049       3.570   4.090  28.104  1.00 23.58           C
ATOM    1281  O   ILE B2049       4.281   3.091  28.120  1.00 24.35           O
ATOM    1282  N   GLU B2050       3.828   5.160  27.360  1.00 22.52           N
ATOM    1283  CA  GLU B2050       4.985   5.238  26.482  1.00 23.92           C
ATOM    1284  CB  GLU B2050       4.980   6.575  25.739  1.00 24.81           C
ATOM    1285  CG  GLU B2050       6.216   6.842  24.901  1.00 27.69           C
ATOM    1286  CD  GLU B2050       6.470   5.767  23.859  1.00 30.29           C
ATOM    1287  OE1 GLU B2050       5.514   5.384  23.149  1.00 32.11           O
ATOM    1288  OE2 GLU B2050       7.632   5.314  23.740  1.00 29.75           O
ATOM    1289  C   GLU B2050       6.278   5.085  27.270  1.00 23.59           C
ATOM    1290  O   GLU B2050       7.235   4.452  26.804  1.00 23.37           O
ATOM    1291  N   TYR B2051       6.304   5.666  28.466  1.00 23.27           N
ATOM    1292  CA  TYR B2051       7.487   5.584  29.306  1.00 23.17           C
ATOM    1293  CB  TYR B2051       7.300   6.397  30.592  1.00 22.74           C
ATOM    1294  CG  TYR B2051       8.520   6.367  31.492  1.00 22.74           C
ATOM    1295  CD1 TYR B2051       8.667   5.382  32.474  1.00 21.76           C
ATOM    1296  CE1 TYR B2051       9.818   5.317  33.263  1.00 23.29           C
ATOM    1297  CD2 TYR B2051       9.555   7.288  31.324  1.00 21.56           C
ATOM    1298  CE2 TYR B2051      10.708   7.230  32.106  1.00 22.47           C
ATOM    1299  CZ  TYR B2051      10.832   6.243  33.072  1.00 24.14           C
ATOM    1300  OH  TYR B2051      11.973   6.182  33.843  1.00 26.11           O
ATOM    1301  C   TYR B2051       7.749   4.123  29.645  1.00 22.35           C
ATOM    1302  O   TYR B2051       8.834   3.603  29.397  1.00 21.78           O
ATOM    1303  N   LEU B2052       6.735   3.470  30.200  1.00 21.05           N
ATOM    1304  CA  LEU B2052       6.820   2.069  30.581  1.00 20.91           C
ATOM    1305  CB  LEU B2052       5.486   1.626  31.193  1.00 19.71           C
ATOM    1306  CG  LEU B2052       5.321   0.141  31.535  1.00 20.97           C
ATOM    1307  CD1 LEU B2052       6.463  -0.293  32.453  1.00 20.68           C
ATOM    1308  CD2 LEU B2052       3.953  -0.092  32.206  1.00 18.56           C
ATOM    1309  C   LEU B2052       7.176   1.164  29.394  1.00 19.19           C
ATOM    1310  O   LEU B2052       8.055   0.305  29.502  1.00 18.65           O
ATOM    1311  N   ALA B2053       6.501   1.365  28.264  1.00 18.96           N
ATOM    1312  CA  ALA B2053       6.748   0.553  27.075  1.00 18.97           C
ATOM    1313  CB  ALA B2053       5.712   0.867  26.003  1.00 19.24           C
ATOM    1314  C   ALA B2053       8.153   0.777  26.526  1.00 19.65           C
ATOM    1315  O   ALA B2053       8.811  -0.167  26.067  1.00 19.77           O
ATOM    1316  N   GLY B2054       8.604   2.028  26.569  1.00 18.25           N
ATOM    1317  CA  GLY B2054       9.930   2.355  26.084  1.00 16.89           C
ATOM    1318  C   GLY B2054      11.004   1.748  26.970  1.00 18.42           C
ATOM    1319  O   GLY B2054      12.072   1.344  26.488  1.00 17.94           O
ATOM    1320  N   ARG B2055      10.731   1.692  28.270  1.00 16.40           N
ATOM    1321  CA  ARG B2055      11.684   1.112  29.202  1.00 19.09           C
ATOM    1322  CB  ARG B2055      11.253   1.377  30.647  1.00 20.94           C
ATOM    1323  CG  ARG B2055      12.060   2.478  31.329  1.00 20.89           C
ATOM    1324  CD  ARG B2055      11.968   3.790  30.570  1.00 24.51           C
ATOM    1325  NE  ARG B2055      12.987   4.745  31.003  1.00 25.33           N
ATOM    1326  CZ  ARG B2055      13.239   5.897  30.388  1.00 25.95           C
ATOM    1327  NH1 ARG B2055      12.544   6.243  29.313  1.00 23.97           N
ATOM    1328  NH2 ARG B2055      14.194   6.700  30.843  1.00 25.82           N
ATOM    1329  C   ARG B2055      11.774  -0.386  28.932  1.00 18.98           C
ATOM    1330  O   ARG B2055      12.855  -0.971  28.985  1.00 18.90           O
ATOM    1331  N   TRP B2056      10.632  -1.003  28.631  1.00 20.10           N
ATOM    1332  CA  TRP B2056      10.613  -2.426  28.322  1.00 20.52           C
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ATOM   1333  CB  TRP B2056       9.178  -2.930  28.107  1.00 22.74           C
ATOM   1334  CG  TRP B2056       9.118  -4.394  27.738  1.00 26.17           C
ATOM   1335  CD2 TRP B2056       8.573  -5.459  28.527  1.00 27.99           C
ATOM   1336  CE2 TRP B2056       8.791  -6.661  27.815  1.00 28.39           C
ATOM   1337  CE3 TRP B2056       7.924  -5.516  29.767  1.00 27.60           C
ATOM   1338  CD1 TRP B2056       9.623  -4.978  26.607  1.00 26.87           C
ATOM   1339  NE1 TRP B2056       9.432  -6.337  26.648  1.00 29.27           N
ATOM   1340  CZ2 TRP B2056       8.384  -7.906  28.301  1.00 29.62           C
ATOM   1341  CZ3 TRP B2056       7.516  -6.760  30.253  1.00 30.44           C
ATOM   1342  CH2 TRP B2056       7.750  -7.937  29.519  1.00 30.93           C
ATOM   1343  C   TRP B2056      11.430  -2.659  27.056  1.00 18.69           C
ATOM   1344  O   TRP B2056      12.265  -3.562  27.007  1.00 15.35           O
ATOM   1345  N   SER B2057      11.190  -1.843  26.032  1.00 18.10           N
ATOM   1346  CA  SER B2057      11.925  -1.993  24.778  1.00 19.73           C
ATOM   1347  CB  SER B2057      11.475  -0.948  23.756  1.00 21.79           C
ATOM   1348  OG  SER B2057      10.174  -1.245  23.273  1.00 30.44           O
ATOM   1349  C   SER B2057      13.427  -1.857  25.009  1.00 17.21           C
ATOM   1350  O   SER B2057      14.207  -2.679  24.539  1.00 17.96           O
ATOM   1351  N   ALA B2058      13.821  -0.814  25.728  1.00 15.24           N
ATOM   1352  CA  ALA B2058      15.233  -0.568  26.016  1.00 15.12           C
ATOM   1353  CB  ALA B2058      15.387   0.718  26.819  1.00 14.34           C
ATOM   1354  C   ALA B2058      15.879  -1.724  26.768  1.00 15.45           C
ATOM   1355  O   ALA B2058      16.981  -2.158  26.421  1.00 14.80           O
ATOM   1356  N   LYS B2059      15.203  -2.216  27.804  1.00 15.14           N
ATOM   1357  CA  LYS B2059      15.748  -3.315  28.593  1.00 16.97           C
ATOM   1358  CB  LYS B2059      14.909  -3.523  29.860  1.00 18.38           C
ATOM   1359  CG  LYS B2059      14.958  -2.303  30.796  1.00 17.80           C
ATOM   1360  CD  LYS B2059      14.216  -2.546  32.097  1.00 19.77           C
ATOM   1361  CE  LYS B2059      14.345  -1.327  33.021  1.00 19.57           C
ATOM   1362  NZ  LYS B2059      13.932  -1.624  34.417  1.00 20.44           N
ATOM   1363  C   LYS B2059      15.857  -4.608  27.792  1.00 17.95           C
ATOM   1364  O   LYS B2059      16.805  -5.375  27.967  1.00 16.15           O
ATOM   1365  N   GLU B2060      14.897  -4.844  26.904  1.00 17.88           N
ATOM   1366  CA  GLU B2060      14.923  -6.041  26.070  1.00 17.87           C
ATOM   1367  CB  GLU B2060      13.551  -6.261  25.420  1.00 19.58           C
ATOM   1368  CG  GLU B2060      13.519  -7.359  24.361  1.00 23.62           C
ATOM   1369  CD  GLU B2060      13.834  -8.753  24.897  1.00 24.96           C
ATOM   1370  OE1 GLU B2060      14.150  -8.906  26.099  1.00 27.91           O
ATOM   1371  OE2 GLU B2060      13.764  -9.707  24.096  1.00 27.02           O
ATOM   1372  C   GLU B2060      16.013  -5.885  24.999  1.00 17.82           C
ATOM   1373  O   GLU B2060      16.769  -6.816  24.741  1.00 16.78           O
ATOM   1374  N   ALA B2061      16.106  -4.700  24.396  1.00 15.53           N
ATOM   1375  CA  ALA B2061      17.126  -4.443  23.379  1.00 15.22           C
ATOM   1376  CB  ALA B2061      17.017  -3.010  22.868  1.00 12.83           C
ATOM   1377  C   ALA B2061      18.514  -4.683  23.984  1.00 15.45           C
ATOM   1378  O   ALA B2061      19.396  -5.252  23.337  1.00 15.13           O
ATOM   1379  N   PHE B2062      18.699  -4.248  25.227  1.00 15.78           N
ATOM   1380  CA  PHE B2062      19.965  -4.441  25.923  1.00 16.16           C
ATOM   1381  CB  PHE B2062      19.972  -3.664  27.244  1.00 18.34           C
ATOM   1382  CG  PHE B2062      21.173  -3.954  28.110  1.00 20.05           C
ATOM   1383  CD1 PHE B2062      21.180  -5.055  28.972  1.00 20.65           C
ATOM   1384  CD2 PHE B2062      22.311  -3.158  28.030  1.00 20.37           C
ATOM   1385  CE1 PHE B2062      22.304  -5.358  29.737  1.00 20.45           C
ATOM   1386  CE2 PHE B2062      23.450  -3.453  28.796  1.00 21.28           C
ATOM   1387  CZ  PHE B2062      23.443  -4.552  29.647  1.00 20.21           C
ATOM   1388  C   PHE B2062      20.210  -5.930  26.195  1.00 17.69           C
ATOM   1389  O   PHE B2062      21.297  -6.455  25.933  1.00 17.00           O
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ATOM   1390  N    SER B2063       19.203  -6.608  26.730  1.00 18.58          N
ATOM   1391  CA   SER B2063       19.336  -8.033  27.016  1.00 19.54          C
ATOM   1392  CB   SER B2063       18.025  -8.584  27.565  1.00 19.74          C
ATOM   1393  OG   SER B2063       17.710  -7.950  28.793  1.00 22.28          O
ATOM   1394  C    SER B2063       19.733  -8.789  25.753  1.00 20.63          C
ATOM   1395  O    SER B2063       20.574  -9.682  25.803  1.00 18.71          O
ATOM   1396  N    LYS B2064       19.128  -8.430  24.620  1.00 19.41          N
ATOM   1397  CA   LYS B2064       19.457  -9.088  23.362  1.00 20.24          C
ATOM   1398  CB   LYS B2064       18.447  -8.705  22.276  1.00 21.74          C
ATOM   1399  CG   LYS B2064       17.036  -9.246  22.553  1.00 21.35          C
ATOM   1400  CD   LYS B2064       16.007  -8.785  21.525  1.00 21.53          C
ATOM   1401  CE   LYS B2064       16.378  -9.233  20.116  1.00 19.60          C
ATOM   1402  NZ   LYS B2064       15.400  -8.764  19.091  1.00 19.68          N
ATOM   1403  C    LYS B2064       20.875  -8.709  22.946  1.00 20.67          C
ATOM   1404  O    LYS B2064       21.573  -9.498  22.310  1.00 21.49          O
ATOM   1405  N    ALA B2065       21.303  -7.502  23.308  1.00 17.85          N
ATOM   1406  CA   ALA B2065       22.660  -7.059  22.995  1.00 19.57          C
ATOM   1407  CB   ALA B2065       22.826  -5.576  23.323  1.00 15.70          C
ATOM   1408  C    ALA B2065       23.647  -7.892  23.820  1.00 20.80          C
ATOM   1409  O    ALA B2065       24.793  -8.096  23.414  1.00 18.12          O
ATOM   1410  N    MET B2066       23.199  -8.359  24.985  1.00 22.49          N
ATOM   1411  CA   MET B2066       24.039  -9.187  25.849  1.00 27.36          C
ATOM   1412  CB   MET B2066       23.608  -9.069  27.310  1.00 27.69          C
ATOM   1413  CG   MET B2066       23.933  -7.749  27.971  1.00 30.93          C
ATOM   1414  SD   MET B2066       25.678  -7.548  28.342  1.00 35.00          S
ATOM   1415  CE   MET B2066       25.840  -8.691  29.727  1.00 35.63          C
ATOM   1416  C    MET B2066       23.927 -10.646  25.416  1.00 28.77          C
ATOM   1417  O    MET B2066       24.570 -11.517  25.990  1.00 29.95          O
ATOM   1418  N    GLY B2067       23.095 -10.906  24.411  1.00 30.61          N
ATOM   1419  CA   GLY B2067       22.927 -12.266  23.924  1.00 32.14          C
ATOM   1420  C    GLY B2067       21.816 -13.073  24.577  1.00 33.83          C
ATOM   1421  O    GLY B2067       21.728 -14.282  24.353  1.00 35.17          O
ATOM   1422  N    THR B2068       20.964 -12.425  25.369  1.00 33.49          N
ATOM   1423  CA   THR B2068       19.870 -13.124  26.048  1.00 35.61          C
ATOM   1424  CB   THR B2068       20.225 -13.393  27.528  1.00 37.06          C
ATOM   1425  OG1  THR B2068       20.480 -12.149  28.194  1.00 37.62          O
ATOM   1426  CG2  THR B2068       21.461 -14.274  27.622  1.00 40.72          C
ATOM   1427  C    THR B2068       18.519 -12.396  26.008  1.00 34.51          C
ATOM   1428  O    THR B2068       18.212 -11.679  25.054  1.00 34.74          O
ATOM   1429  N    GLY B2069       17.715 -12.598  27.051  1.00 34.71          N
ATOM   1430  CA   GLY B2069       16.403 -11.970  27.132  1.00 33.79          C
ATOM   1431  C    GLY B2069       16.195 -11.248  28.452  1.00 33.36          C
ATOM   1432  O    GLY B2069       16.823 -11.590  29.455  1.00 32.35          O
ATOM   1433  N    ILE B2070       15.300 -10.263  28.467  1.00 33.38          N
ATOM   1434  CA   ILE B2070       15.059  -9.487  29.680  1.00 34.29          C
ATOM   1435  CB   ILE B2070       14.122  -8.283  29.401  1.00 33.36          C
ATOM   1436  CG2  ILE B2070       12.761  -8.768  28.904  1.00 35.55          C
ATOM   1437  CG1  ILE B2070       13.966  -7.446  30.672  1.00 32.13          C
ATOM   1438  CD1  ILE B2070       15.277  -6.991  31.269  1.00 28.50          C
ATOM   1439  C    ILE B2070       14.514 -10.295  30.856  1.00 35.39          C
ATOM   1440  O    ILE B2070       14.868 -10.039  32.008  1.00 35.52          O
ATOM   1441  N    SER B2071       13.666 -11.276  30.572  1.00 37.28          N
ATOM   1442  CA   SER B2071       13.104 -12.104  31.630  1.00 39.77          C
ATOM   1443  CB   SER B2071       12.020 -13.025  31.066  1.00 42.43          C
ATOM   1444  OG   SER B2071       11.433 -13.795  32.102  1.00 46.76          O
ATOM   1445  C    SER B2071       14.189 -12.947  32.299  1.00 40.07          C
ATOM   1446  O    SER B2071       14.024 -13.402  33.428  1.00 39.81          O
ATOM   1447  N    LYS B2072      15.299 -13.154  31.596  1.00 39.77           N
ATOM   1448  CA   LYS B2072      16.403 -13.940  32.132  1.00 39.15           C
ATOM   1449  CB   LYS B2072      17.115 -14.689  31.007  1.00 40.68           C
ATOM   1450  CG   LYS B2072      16.225 -15.656  30.252  1.00 43.38           C
ATOM   1451  CD   LYS B2072      16.996 -16.371  29.151  1.00 44.69           C
ATOM   1452  CE   LYS B2072      16.070 -17.260  28.342  1.00 46.81           C
ATOM   1453  NZ   LYS B2072      15.337 -18.225  29.214  1.00 47.85           N
ATOM   1454  C    LYS B2072      17.396 -13.039  32.842  1.00 38.30           C
ATOM   1455  O    LYS B2072      17.952 -13.401  33.879  1.00 38.50           O
ATOM   1456  N    LEU B2073      17.613 -11.860  32.269  1.00 36.74           N
ATOM   1457  CA   LEU B2073      18.540 -10.883  32.821  1.00 34.89           C
ATOM   1458  CB   LEU B2073      18.817  -9.803  31.766  1.00 35.18           C
ATOM   1459  CG   LEU B2073      20.010  -8.856  31.910  1.00 35.71           C
ATOM   1460  CD1  LEU B2073      19.804  -7.943  33.107  1.00 37.71           C
ATOM   1461  CD2  LEU B2073      21.296  -9.661  32.050  1.00 36.74           C
ATOM   1462  C    LEU B2073      17.961 -10.259  34.098  1.00 34.21           C
ATOM   1463  O    LEU B2073      18.683 -10.044  35.071  1.00 32.72           O
ATOM   1464  N    GLY B2074      16.658  -9.982  34.090  1.00 33.08           N
ATOM   1465  CA   GLY B2074      16.014  -9.383  35.247  1.00 32.12           C
ATOM   1466  C    GLY B2074      15.762  -7.897  35.053  1.00 30.96           C
ATOM   1467  O    GLY B2074      16.702  -7.127  34.871  1.00 31.73           O
ATOM   1468  N    PHE B2075      14.497  -7.489  35.095  1.00 29.97           N
ATOM   1469  CA   PHE B2075      14.139  -6.083  34.913  1.00 30.52           C
ATOM   1470  CB   PHE B2075      12.620  -5.896  34.973  1.00 32.55           C
ATOM   1471  CG   PHE B2075      11.880  -6.511  33.822  1.00 33.89           C
ATOM   1472  CD1  PHE B2075      11.474  -7.843  33.868  1.00 35.06           C
ATOM   1473  CD2  PHE B2075      11.578  -5.755  32.693  1.00 34.72           C
ATOM   1474  CE1  PHE B2075      10.774  -8.412  32.806  1.00 35.34           C
ATOM   1475  CE2  PHE B2075      10.879  -6.316  31.623  1.00 34.77           C
ATOM   1476  CZ   PHE B2075      10.477  -7.646  31.681  1.00 34.64           C
ATOM   1477  C    PHE B2075      14.769  -5.146  35.934  1.00 29.45           C
ATOM   1478  O    PHE B2075      15.159  -4.025  35.599  1.00 30.37           O
ATOM   1479  N    GLN B2076      14.867  -5.607  37.177  1.00 28.05           N
ATOM   1480  CA   GLN B2076      15.417  -4.796  38.259  1.00 27.24           C
ATOM   1481  CB   GLN B2076      15.043  -5.420  39.607  1.00 27.56           C
ATOM   1482  CG   GLN B2076      13.539  -5.436  39.859  1.00 27.74           C
ATOM   1483  CD   GLN B2076      12.929  -4.041  39.834  1.00 30.00           C
ATOM   1484  OE1  GLN B2076      11.896  -3.807  39.193  1.00 31.13           O
ATOM   1485  NE2  GLN B2076      13.563  -3.107  40.536  1.00 28.51           N
ATOM   1486  C    GLN B2076      16.920  -4.538  38.198  1.00 26.61           C
ATOM   1487  O    GLN B2076      17.430  -3.698  38.935  1.00 25.98           O
ATOM   1488  N    ASP B2077      17.621  -5.251  37.320  1.00 26.64           N
ATOM   1489  CA   ASP B2077      19.062  -5.084  37.160  1.00 27.59           C
ATOM   1490  CB   ASP B2077      19.723  -6.426  36.847  1.00 32.09           C
ATOM   1491  CG   ASP B2077      19.749  -7.352  38.041  1.00 35.66           C
ATOM   1492  OD1  ASP B2077      18.670  -7.841  38.440  1.00 39.93           O
ATOM   1493  OD2  ASP B2077      20.850  -7.584  38.586  1.00 40.87           O
ATOM   1494  C    ASP B2077      19.403  -4.087  36.054  1.00 26.77           C
ATOM   1495  O    ASP B2077      20.571  -3.825  35.779  1.00 25.66           O
ATOM   1496  N    LEU B2078      18.375  -3.539  35.420  1.00 24.12           N
ATOM   1497  CA   LEU B2078      18.570  -2.571  34.356  1.00 23.25           C
ATOM   1498  CB   LEU B2078      18.058  -3.118  33.018  1.00 23.97           C
ATOM   1499  CG   LEU B2078      18.750  -4.370  32.475  1.00 24.92           C
ATOM   1500  CD1  LEU B2078      17.987  -4.914  31.276  1.00 23.04           C
ATOM   1501  CD2  LEU B2078      20.180  -4.021  32.089  1.00 26.74           C
ATOM   1502  C    LEU B2078      17.795  -1.321  34.702  1.00 23.29           C
ATOM   1503  O    LEU B2078      16.669  -1.390  35.196  1.00 23.17           O
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ATOM   1504  N   GLU B2079      18.397  -0.173  34.446  1.00 21.42           N
ATOM   1505  CA  GLU B2079      17.724   1.075  34.716  1.00 21.45           C
ATOM   1506  CB  GLU B2079      18.192   1.666  36.036  1.00 22.77           C
ATOM   1507  CG  GLU B2079      17.346   2.835  36.477  1.00 24.03           C
ATOM   1508  CD  GLU B2079      17.726   3.340  37.848  1.00 25.73           C
ATOM   1509  OE1 GLU B2079      18.797   3.972  37.976  1.00 26.42           O
ATOM   1510  OE2 GLU B2079      16.950   3.099  38.798  1.00 27.63           O
ATOM   1511  C   GLU B2079      18.014   2.055  33.600  1.00 20.55           C
ATOM   1512  O   GLU B2079      19.167   2.241  33.203  1.00 20.96           O
ATOM   1513  N   VAL B2080      16.954   2.666  33.095  1.00 18.00           N
ATOM   1514  CA  VAL B2080      17.055   3.648  32.033  1.00 18.55           C
ATOM   1515  CB  VAL B2080      16.268   3.211  30.769  1.00 16.14           C
ATOM   1516  CG1 VAL B2080      16.429   4.262  29.686  1.00 16.12           C
ATOM   1517  CG2 VAL B2080      16.755   1.849  30.276  1.00 14.67           C
ATOM   1518  C   VAL B2080      16.442   4.948  32.549  1.00 19.85           C
ATOM   1519  O   VAL B2080      15.234   5.019  32.805  1.00 19.59           O
ATOM   1520  N   LEU B2081      17.279   5.966  32.708  1.00 20.39           N
ATOM   1521  CA  LEU B2081      16.825   7.271  33.176  1.00 21.24           C
ATOM   1522  CB  LEU B2081      17.644   7.716  34.394  1.00 21.31           C
ATOM   1523  CG  LEU B2081      17.683   6.758  35.593  1.00 22.71           C
ATOM   1524  CD1 LEU B2081      18.641   7.299  36.661  1.00 23.10           C
ATOM   1525  CD2 LEU B2081      16.280   6.594  36.165  1.00 22.25           C
ATOM   1526  C   LEU B2081      17.027   8.259  32.040  1.00 22.16           C
ATOM   1527  O   LEU B2081      17.421   7.882  30.934  1.00 22.05           O
ATOM   1528  N   ASN B2082      16.755   9.526  32.309  1.00 22.54           N
ATOM   1529  CA  ASN B2082      16.933  10.561  31.303  1.00 24.30           C
ATOM   1530  CB  ASN B2082      15.598  11.247  31.022  1.00 25.64           C
ATOM   1531  CG  ASN B2082      14.657  10.371  30.207  1.00 27.22           C
ATOM   1532  OD1 ASN B2082      14.779  10.280  28.982  1.00 28.88           O
ATOM   1533  ND2 ASN B2082      13.729   9.710  30.883  1.00 24.27           N
ATOM   1534  C   ASN B2082      17.945  11.555  31.840  1.00 25.00           C
ATOM   1535  O   ASN B2082      17.860  11.958  33.001  1.00 23.46           O
ATOM   1536  N   ASN B2083      18.913  11.939  31.010  1.00 25.22           N
ATOM   1537  CA  ASN B2083      19.920  12.890  31.454  1.00 25.69           C
ATOM   1538  CB  ASN B2083      21.215  12.744  30.641  1.00 25.99           C
ATOM   1539  CG  ASN B2083      21.013  12.961  29.153  1.00 27.46           C
ATOM   1540  OD1 ASN B2083      20.173  13.758  28.729  1.00 25.62           O
ATOM   1541  ND2 ASN B2083      21.811  12.265  28.348  1.00 27.23           N
ATOM   1542  C   ASN B2083      19.410  14.330  31.397  1.00 26.79           C
ATOM   1543  O   ASN B2083      18.216  14.571  31.215  1.00 25.77           O
ATOM   1544  N   GLU B2084      20.322  15.281  31.559  1.00 29.60           N
ATOM   1545  CA  GLU B2084      19.982  16.701  31.563  1.00 31.78           C
ATOM   1546  CB  GLU B2084      21.238  17.539  31.827  1.00 33.94           C
ATOM   1547  CG  GLU B2084      22.148  16.960  32.896  1.00 39.23           C
ATOM   1548  CD  GLU B2084      22.774  15.640  32.470  1.00 41.35           C
ATOM   1549  OE1 GLU B2084      23.642  15.652  31.567  1.00 42.45           O
ATOM   1550  OE2 GLU B2084      22.390  14.588  33.030  1.00 42.21           O
ATOM   1551  C   GLU B2084      19.351  17.153  30.253  1.00 30.81           C
ATOM   1552  O   GLU B2084      18.472  18.013  30.242  1.00 29.26           O
ATOM   1553  N   ARG B2085      19.808  16.573  29.148  1.00 30.86           N
ATOM   1554  CA  ARG B2085      19.291  16.940  27.838  1.00 31.05           C
ATOM   1555  CB  ARG B2085      20.364  16.716  26.775  1.00 33.27           C
ATOM   1556  CG  ARG B2085      21.598  17.554  27.005  1.00 35.81           C
ATOM   1557  CD  ARG B2085      22.636  17.335  25.928  1.00 38.24           C
ATOM   1558  NE  ARG B2085      23.735  18.286  26.060  1.00 41.03           N
ATOM   1559  CZ  ARG B2085      24.544  18.349  27.110  1.00 42.41           C
ATOM   1560  NH1 ARG B2085      24.381  17.515  28.128  1.00 43.26           N
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ATOM   1561  NH2 ARG B2085      25.523  19.239  27.138  1.00 44.30           N
ATOM   1562  C   ARG B2085      18.024  16.190  27.465  1.00 30.14           C
ATOM   1563  O   ARG B2085      17.450  16.432  26.408  1.00 31.11           O
ATOM   1564  N   GLY B2086      17.593  15.273  28.326  1.00 29.20           N
ATOM   1565  CA  GLY B2086      16.371  14.530  28.057  1.00 27.93           C
ATOM   1566  C   GLY B2086      16.531  13.222  27.304  1.00 26.69           C
ATOM   1567  O   GLY B2086      15.541  12.581  26.952  1.00 27.22           O
ATOM   1568  N   ALA B2087      17.770  12.818  27.056  1.00 24.98           N
ATOM   1569  CA  ALA B2087      18.033  11.582  26.340  1.00 23.11           C
ATOM   1570  CB  ALA B2087      19.358  11.692  25.589  1.00 24.73           C
ATOM   1571  C   ALA B2087      18.065  10.369  27.269  1.00 22.69           C
ATOM   1572  O   ALA B2087      18.611  10.431  28.370  1.00 22.81           O
ATOM   1573  N   PRO B2088      17.481   9.242  26.833  1.00 22.85           N
ATOM   1574  CD  PRO B2088      16.722   9.014  25.588  1.00 23.63           C
ATOM   1575  CA  PRO B2088      17.485   8.039  27.674  1.00 21.17           C
ATOM   1576  CB  PRO B2088      16.471   7.134  26.982  1.00 22.95           C
ATOM   1577  CG  PRO B2088      16.650   7.489  25.528  1.00 24.16           C
ATOM   1578  C   PRO B2088      18.879   7.416  27.716  1.00 20.46           C
ATOM   1579  O   PRO B2088      19.584   7.407  26.712  1.00 18.12           O
ATOM   1580  N   TYR B2089      19.280   6.906  28.878  1.00 19.76           N
ATOM   1581  CA  TYR B2089      20.593   6.275  29.019  1.00 19.97           C
ATOM   1582  CB  TYR B2089      21.660   7.337  29.324  1.00 20.30           C
ATOM   1583  CG  TYR B2089      21.605   7.850  30.743  1.00 21.25           C
ATOM   1584  CD1 TYR B2089      22.471   7.347  31.719  1.00 23.06           C
ATOM   1585  CE1 TYR B2089      22.386   7.765  33.046  1.00 22.62           C
ATOM   1586  CD2 TYR B2089      20.651   8.793  31.128  1.00 21.67           C
ATOM   1587  CE2 TYR B2089      20.557   9.218  32.454  1.00 23.51           C
ATOM   1588  CZ  TYR B2089      21.429   8.693  33.404  1.00 22.23           C
ATOM   1589  OH  TYR B2089      21.327   9.078  34.715  1.00 23.91           O
ATOM   1590  C   TYR B2089      20.547   5.246  30.148  1.00 18.84           C
ATOM   1591  O   TYR B2089      19.738   5.356  31.066  1.00 16.92           O
ATOM   1592  N   PHE B2090      21.408   4.237  30.076  1.00 19.96           N
ATOM   1593  CA  PHE B2090      21.432   3.218  31.116  1.00 20.18           C
ATOM   1594  CB  PHE B2090      22.015   1.906  30.588  1.00 18.86           C
ATOM   1595  CG  PHE B2090      21.031   1.078  29.813  1.00 17.77           C
ATOM   1596  CD1 PHE B2090      20.843   1.282  28.452  1.00 18.34           C
ATOM   1597  CD2 PHE B2090      20.276   0.102  30.455  1.00 17.66           C
ATOM   1598  CE1 PHE B2090      19.915   0.523  27.737  1.00 16.58           C
ATOM   1599  CE2 PHE B2090      19.344  -0.666  29.751  1.00 16.83           C
ATOM   1600  CZ  PHE B2090      19.166  -0.453  28.393  1.00 18.42           C
ATOM   1601  C   PHE B2090      22.249   3.683  32.307  1.00 21.96           C
ATOM   1602  O   PHE B2090      23.464   3.837  32.215  1.00 21.17           O
ATOM   1603  N   SER B2091      21.569   3.916  33.423  1.00 21.79           N
ATOM   1604  CA  SER B2091      22.233   4.346  34.642  1.00 23.26           C
ATOM   1605  CB  SER B2091      21.269   5.171  35.498  1.00 24.51           C
ATOM   1606  OG  SER B2091      20.046   4.473  35.689  1.00 27.15           O
ATOM   1607  C   SER B2091      22.676   3.101  35.406  1.00 24.05           C
ATOM   1608  O   SER B2091      23.572   3.158  36.241  1.00 22.27           O
ATOM   1609  N   GLN B2092      22.039   1.974  35.100  1.00 24.23           N
ATOM   1610  CA  GLN B2092      22.343   0.702  35.750  1.00 26.68           C
ATOM   1611  CB  GLN B2092      21.324   0.420  36.858  1.00 30.19           C
ATOM   1612  CG  GLN B2092      21.738   0.888  38.236  1.00 36.96           C
ATOM   1613  CD  GLN B2092      22.791  -0.013  38.846  1.00 41.69           C
ATOM   1614  OE1 GLN B2092      23.923  -0.086  38.360  1.00 44.08           O
ATOM   1615  NE2 GLN B2092      22.419  -0.719  39.914  1.00 43.86           N
ATOM   1616  C   GLN B2092      22.318  -0.450  34.755  1.00 25.68           C
ATOM   1617  O   GLN B2092      21.350  -0.628  34.015  1.00 25.64           O
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ATOM   1618  N   ALA B2093      23.378  -1.243  34.750  1.00 24.06      N
ATOM   1619  CA  ALA B2093      23.451  -2.379  33.845  1.00 24.55      C
ATOM   1620  CB  ALA B2093      23.544  -1.896  32.401  1.00 23.95      C
ATOM   1621  C   ALA B2093      24.654  -3.240  34.182  1.00 24.42      C
ATOM   1622  O   ALA B2093      25.669  -2.737  34.662  1.00 23.73      O
ATOM   1623  N   PRO B2094      24.542  -4.560  33.958  1.00 24.28      N
ATOM   1624  CD  PRO B2094      23.286  -5.266  33.634  1.00 24.45      C
ATOM   1625  CA  PRO B2094      25.625  -5.509  34.228  1.00 24.13      C
ATOM   1626  CB  PRO B2094      24.882  -6.827  34.404  1.00 24.53      C
ATOM   1627  CG  PRO B2094      23.752  -6.693  33.412  1.00 25.43      C
ATOM   1628  C   PRO B2094      26.575  -5.532  33.033  1.00 25.18      C
ATOM   1629  O   PRO B2094      26.687  -6.538  32.330  1.00 27.39      O
ATOM   1630  N   PHE B2095      27.237  -4.406  32.795  1.00 25.59      N
ATOM   1631  CA  PHE B2095      28.166  -4.276  31.674  1.00 26.28      C
ATOM   1632  CB  PHE B2095      27.394  -3.937  30.392  1.00 26.01      C
ATOM   1633  CG  PHE B2095      28.264  -3.808  29.176  1.00 25.16      C
ATOM   1634  CD1 PHE B2095      28.289  -2.622  28.448  1.00 23.33      C
ATOM   1635  CD2 PHE B2095      29.070  -4.864  28.766  1.00 24.13      C
ATOM   1636  CE1 PHE B2095      29.106  -2.488  27.333  1.00 23.09      C
ATOM   1637  CE2 PHE B2095      29.890  -4.739  27.652  1.00 24.48      C
ATOM   1638  CZ  PHE B2095      29.906  -3.542  26.933  1.00 21.85      C
ATOM   1639  C   PHE B2095      29.157  -3.168  32.000  1.00 25.62      C
ATOM   1640  O   PHE B2095      28.768  -2.080  32.413  1.00 26.70      O
ATOM   1641  N   SER B2096      30.438  -3.441  31.804  1.00 26.81      N
ATOM   1642  CA  SER B2096      31.472  -2.466  32.122  1.00 27.94      C
ATOM   1643  CB  SER B2096      32.750  -3.203  32.531  1.00 27.66      C
ATOM   1644  OG  SER B2096      33.144  -4.111  31.518  1.00 29.62      O
ATOM   1645  C   SER B2096      31.787  -1.469  31.007  1.00 27.71      C
ATOM   1646  O   SER B2096      32.430  -0.452  31.249  1.00 27.75      O
ATOM   1647  N   GLY B2097      31.325  -1.746  29.792  1.00 26.55      N
ATOM   1648  CA  GLY B2097      31.611  -0.847  28.690  1.00 23.99      C
ATOM   1649  C   GLY B2097      30.611   0.274  28.499  1.00 23.68      C
ATOM   1650  O   GLY B2097      29.869   0.639  29.413  1.00 22.73      O
ATOM   1651  N   LYS B2098      30.606   0.838  27.299  1.00 23.32      N
ATOM   1652  CA  LYS B2098      29.682   1.912  26.975  1.00 23.52      C
ATOM   1653  CB  LYS B2098      30.323   2.896  25.995  1.00 25.66      C
ATOM   1654  CG  LYS B2098      31.546   3.599  26.562  1.00 29.30      C
ATOM   1655  CD  LYS B2098      32.162   4.532  25.545  1.00 31.81      C
ATOM   1656  CE  LYS B2098      33.364   5.247  26.128  1.00 35.72      C
ATOM   1657  NZ  LYS B2098      33.970   6.194  25.154  1.00 38.45      N
ATOM   1658  C   LYS B2098      28.438   1.302  26.356  1.00 21.94      C
ATOM   1659  O   LYS B2098      28.518   0.350  25.570  1.00 20.64      O
ATOM   1660  N   ILE B2099      27.294   1.862  26.721  1.00 20.44      N
ATOM   1661  CA  ILE B2099      26.008   1.400  26.236  1.00 19.38      C
ATOM   1662  CB  ILE B2099      25.109   1.012  27.421  1.00 19.92      C
ATOM   1663  CG2 ILE B2099      23.804   0.423  26.919  1.00 20.26      C
ATOM   1664  CG1 ILE B2099      25.839  -0.008  28.302  1.00 19.45      C
ATOM   1665  CD1 ILE B2099      25.193  -0.230  29.663  1.00 21.98      C
ATOM   1666  C   ILE B2099      25.352   2.529  25.444  1.00 19.88      C
ATOM   1667  O   ILE B2099      24.950   3.546  26.011  1.00 19.12      O
ATOM   1668  N   TRP B2100      25.267   2.352  24.129  1.00 19.02      N
ATOM   1669  CA  TRP B2100      24.662   3.351  23.265  1.00 17.64      C
ATOM   1670  CB  TRP B2100      25.430   3.431  21.951  1.00 19.81      C
ATOM   1671  CG  TRP B2100      26.840   3.861  22.165  1.00 20.97      C
ATOM   1672  CD2 TRP B2100      27.295   5.202  22.383  1.00 21.20      C
ATOM   1673  CE2 TRP B2100      28.680   5.137  22.640  1.00 20.87      C
ATOM   1674  CE3 TRP B2100      26.661   6.454  22.393  1.00 22.40      C
ATOM   1675  CD1 TRP B2100      27.938   3.059  22.289  1.00 22.80          C
ATOM   1676  NE1 TRP B2100      29.050   3.818  22.576  1.00 21.53          N
ATOM   1677  CZ2 TRP B2100      29.448   6.279  22.901  1.00 21.01          C
ATOM   1678  CZ3 TRP B2100      27.425   7.591  22.654  1.00 19.76          C
ATOM   1679  CH2 TRP B2100      28.803   7.492  22.905  1.00 20.24          C
ATOM   1680  C   TRP B2100      23.207   2.987  23.023  1.00 17.98          C
ATOM   1681  O   TRP B2100      22.889   2.033  22.308  1.00 19.71          O
ATOM   1682  N   LEU B2101      22.323   3.761  23.632  1.00 16.57          N
ATOM   1683  CA  LEU B2101      20.897   3.527  23.524  1.00 15.94          C
ATOM   1684  CB  LEU B2101      20.292   3.364  24.925  1.00 14.34          C
ATOM   1685  CG  LEU B2101      18.756   3.387  25.013  1.00 15.83          C
ATOM   1686  CD1 LEU B2101      18.195   2.073  24.455  1.00 11.99          C
ATOM   1687  CD2 LEU B2101      18.324   3.555  26.467  1.00 14.03          C
ATOM   1688  C   LEU B2101      20.142   4.632  22.810  1.00 16.46          C
ATOM   1689  O   LEU B2101      20.464   5.807  22.937  1.00 14.73          O
ATOM   1690  N   SER B2102      19.133   4.232  22.047  1.00 17.13          N
ATOM   1691  CA  SER B2102      18.260   5.182  21.380  1.00 16.87          C
ATOM   1692  CB  SER B2102      18.683   5.449  19.945  1.00 17.85          C
ATOM   1693  OG  SER B2102      17.856   6.473  19.405  1.00 18.12          O
ATOM   1694  C   SER B2102      16.866   4.577  21.393  1.00 15.72          C
ATOM   1695  O   SER B2102      16.706   3.368  21.230  1.00 14.46          O
ATOM   1696  N   ILE B2103      15.863   5.414  21.613  1.00 15.13          N
ATOM   1697  CA  ILE B2103      14.478   4.948  21.646  1.00 17.16          C
ATOM   1698  CB  ILE B2103      13.897   5.031  23.070  1.00 17.86          C
ATOM   1699  CG2 ILE B2103      12.439   4.560  23.063  1.00 17.77          C
ATOM   1700  CG1 ILE B2103      14.765   4.215  24.036  1.00 18.09          C
ATOM   1701  CD1 ILE B2103      14.406   4.396  25.497  1.00 17.05          C
ATOM   1702  C   ILE B2103      13.645   5.852  20.749  1.00 17.44          C
ATOM   1703  O   ILE B2103      13.886   7.055  20.684  1.00 17.70          O
ATOM   1704  N   SER B2104      12.675   5.275  20.053  1.00 17.76          N
ATOM   1705  CA  SER B2104      11.803   6.065  19.187  1.00 19.81          C
ATOM   1706  CB  SER B2104      12.355   6.117  17.759  1.00 19.27          C
ATOM   1707  OG  SER B2104      11.570   6.964  16.930  1.00 20.56          O
ATOM   1708  C   SER B2104      10.426   5.432  19.189  1.00 20.64          C
ATOM   1709  O   SER B2104      10.290   4.213  19.338  1.00 22.59          O
ATOM   1710  N   HIS B2105       9.396   6.246  19.020  1.00 20.13          N
ATOM   1711  CA  HIS B2105       8.055   5.698  19.028  1.00 22.93          C
ATOM   1712  CB  HIS B2105       7.456   5.812  20.432  1.00 23.19          C
ATOM   1713  CG  HIS B2105       7.277   7.227  20.890  1.00 24.84          C
ATOM   1714  CD2 HIS B2105       6.221   8.069  20.785  1.00 26.28          C
ATOM   1715  ND1 HIS B2105       8.284   7.950  21.490  1.00 26.53          N
ATOM   1716  CE1 HIS B2105       7.858   9.176  21.737  1.00 25.54          C
ATOM   1717  NE2 HIS B2105       6.608   9.275  21.318  1.00 26.28          N
ATOM   1718  C   HIS B2105       7.116   6.375  18.050  1.00 21.93          C
ATOM   1719  O   HIS B2105       7.395   7.460  17.554  1.00 21.72          O
ATOM   1720  N   THR B2106       6.016   5.687  17.769  1.00 23.48          N
ATOM   1721  CA  THR B2106       4.941   6.183  16.919  1.00 25.16          C
ATOM   1722  CB  THR B2106       4.605   5.242  15.755  1.00 25.21          C
ATOM   1723  OG1 THR B2106       4.222   3.965  16.278  1.00 25.03          O
ATOM   1724  CG2 THR B2106       5.791   5.089  14.823  1.00 25.52          C
ATOM   1725  C   THR B2106       3.775   6.121  17.894  1.00 25.80          C
ATOM   1726  O   THR B2106       3.978   5.862  19.081  1.00 24.98          O
ATOM   1727  N   ASP B2107       2.559   6.329  17.406  1.00 25.90          N
ATOM   1728  CA  ASP B2107       1.397   6.284  18.285  1.00 27.49          C
ATOM   1729  CB  ASP B2107       0.169   6.862  17.574  0.05 26.86          C
ATOM   1730  CG  ASP B2107       0.127   8.380  17.621  0.05 26.92          C
ATOM   1731  OD1 ASP B2107       1.090   9.023  17.157  0.05 27.01          O
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ATOM    1732  OD2 ASP B2107      -0.874    8.930   18.125  0.05 26.97          O
ATOM    1733  C   ASP B2107       1.085    4.877   18.788  1.00 27.36          C
ATOM    1734  O   ASP B2107       0.493    4.717   19.854  1.00 29.78          O
ATOM    1735  N   GLN B2108       1.482    3.858   18.032  1.00 25.07          N
ATOM    1736  CA  GLN B2108       1.207    2.483   18.433  1.00 25.09          C
ATOM    1737  CB  GLN B2108       0.523    1.736   17.293  1.00 26.05          C
ATOM    1738  CG  GLN B2108      -0.728    2.395   16.780  1.00 29.37          C
ATOM    1739  CD  GLN B2108      -1.145    1.827   15.445  1.00 31.53          C
ATOM    1740  OE1 GLN B2108      -0.362    1.822   14.492  1.00 31.44          O
ATOM    1741  NE2 GLN B2108      -2.379    1.345   15.363  1.00 31.86          N
ATOM    1742  C   GLN B2108       2.412    1.658   18.876  1.00 24.58          C
ATOM    1743  O   GLN B2108       2.251    0.710   19.650  1.00 22.64          O
ATOM    1744  N   PHE B2109       3.606    2.000   18.386  1.00 23.20          N
ATOM    1745  CA  PHE B2109       4.800    1.229   18.725  1.00 22.81          C
ATOM    1746  CB  PHE B2109       5.309    0.456   17.501  1.00 24.68          C
ATOM    1747  CG  PHE B2109       4.236   -0.250   16.721  1.00 26.08          C
ATOM    1748  CD1 PHE B2109       3.701    0.329   15.576  1.00 26.47          C
ATOM    1749  CD2 PHE B2109       3.783   -1.505   17.110  1.00 27.02          C
ATOM    1750  CE1 PHE B2109       2.729   -0.336   14.825  1.00 28.36          C
ATOM    1751  CE2 PHE B2109       2.810   -2.177   16.366  1.00 27.54          C
ATOM    1752  CZ  PHE B2109       2.287   -1.592   15.224  1.00 28.20          C
ATOM    1753  C   PHE B2109       5.980    2.037   19.260  1.00 21.56          C
ATOM    1754  O   PHE B2109       6.096    3.233   19.027  1.00 22.22          O
ATOM    1755  N   VAL B2110       6.872    1.358   19.969  1.00 21.04          N
ATOM    1756  CA  VAL B2110       8.073    2.005   20.485  1.00 20.21          C
ATOM    1757  CB  VAL B2110       7.982    2.279   22.006  1.00 19.74          C
ATOM    1758  CG1 VAL B2110       7.649    1.001   22.751  1.00 21.12          C
ATOM    1759  CG2 VAL B2110       9.307    2.861   22.504  1.00 21.25          C
ATOM    1760  C   VAL B2110       9.230    1.063   20.197  1.00 20.24          C
ATOM    1761  O   VAL B2110       9.160   -0.128   20.523  1.00 21.27          O
ATOM    1762  N   THR B2111      10.276    1.580   19.557  1.00 19.29          N
ATOM    1763  CA  THR B2111      11.440    0.763   19.235  1.00 20.44          C
ATOM    1764  CB  THR B2111      11.759    0.788   17.725  1.00 22.75          C
ATOM    1765  OG1 THR B2111      12.116    2.120   17.337  1.00 27.12          O
ATOM    1766  CG2 THR B2111      10.550    0.353   16.911  1.00 26.61          C
ATOM    1767  C   THR B2111      12.668    1.270   19.982  1.00 19.21          C
ATOM    1768  O   THR B2111      12.780    2.455   20.278  1.00 18.06          O
ATOM    1769  N   ALA B2112      13.581    0.353   20.280  1.00 18.16          N
ATOM    1770  CA  ALA B2112      14.810    0.675   20.988  1.00 17.59          C
ATOM    1771  CB  ALA B2112      14.715    0.231   22.442  1.00 14.54          C
ATOM    1772  C   ALA B2112      15.951   -0.052   20.292  1.00 17.15          C
ATOM    1773  O   ALA B2112      15.776   -1.163   19.788  1.00 15.26          O
ATOM    1774  N   SER B2113      17.111    0.588   20.258  1.00 16.75          N
ATOM    1775  CA  SER B2113      18.297    0.015   19.631  1.00 17.12          C
ATOM    1776  CB  SER B2113      18.574    0.705   18.287  1.00 17.55          C
ATOM    1777  OG  SER B2113      19.674    0.112   17.603  1.00 19.24          O
ATOM    1778  C   SER B2113      19.470    0.227   20.588  1.00 16.82          C
ATOM    1779  O   SER B2113      19.677    1.327   21.092  1.00 17.25          O
ATOM    1780  N   VAL B2114      20.220   -0.837   20.840  1.00 16.23          N
ATOM    1781  CA  VAL B2114      21.364   -0.778   21.736  1.00 15.71          C
ATOM    1782  CB  VAL B2114      21.129   -1.591   23.017  1.00 13.94          C
ATOM    1783  CG1 VAL B2114      22.451   -1.731   23.784  1.00 14.11          C
ATOM    1784  CG2 VAL B2114      20.070   -0.923   23.877  1.00 10.51          C
ATOM    1785  C   VAL B2114      22.617   -1.345   21.106  1.00 16.39          C
ATOM    1786  O   VAL B2114      22.578   -2.412   20.492  1.00 16.76          O
ATOM    1787  N   ILE B2115      23.724   -0.625   21.259  1.00 14.68          N
ATOM    1788  CA  ILE B2115      25.014   -1.093   20.763  1.00 15.53          C
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ATOM   1789  CB  ILE B2115      25.589  -0.191  19.664  1.00 16.82        C
ATOM   1790  CG2 ILE B2115      26.983  -0.702  19.253  1.00 14.25        C
ATOM   1791  CG1 ILE B2115      24.649  -0.168  18.461  1.00 17.22        C
ATOM   1792  CD1 ILE B2115      25.020   0.874  17.423  1.00 18.67        C
ATOM   1793  C   ILE B2115      25.956  -1.039  21.956  1.00 16.88        C
ATOM   1794  O   ILE B2115      26.080   0.006  22.614  1.00 16.02        O
ATOM   1795  N   LEU B2116      26.603  -2.164  22.237  1.00 14.98        N
ATOM   1796  CA  LEU B2116      27.529  -2.259  23.361  1.00 16.57        C
ATOM   1797  CB  LEU B2116      27.365  -3.605  24.067  1.00 16.24        C
ATOM   1798  CG  LEU B2116      25.945  -3.870  24.578  1.00 16.49        C
ATOM   1799  CD1 LEU B2116      25.872  -5.256  25.197  1.00 15.73        C
ATOM   1800  CD2 LEU B2116      25.563  -2.803  25.591  1.00 15.00        C
ATOM   1801  C   LEU B2116      28.945  -2.121  22.852  1.00 17.64        C
ATOM   1802  O   LEU B2116      29.297  -2.703  21.827  1.00 17.88        O
ATOM   1803  N   GLU B2117      29.763  -1.373  23.584  1.00 19.16        N
ATOM   1804  CA  GLU B2117      31.132  -1.136  23.166  1.00 22.44        C
ATOM   1805  CB  GLU B2117      31.199   0.229  22.473  1.00 21.55        C
ATOM   1806  CG  GLU B2117      32.570   0.672  22.003  1.00 26.09        C
ATOM   1807  CD  GLU B2117      32.563   2.110  21.477  1.00 26.21        C
ATOM   1808  OE1 GLU B2117      31.958   2.997  22.132  1.00 24.17        O
ATOM   1809  OE2 GLU B2117      33.170   2.355  20.412  1.00 27.59        O
ATOM   1810  C   GLU B2117      32.116  -1.191  24.335  1.00 24.52        C
ATOM   1811  O   GLU B2117      31.829  -0.711  25.432  1.00 21.96        O
ATOM   1812  N   GLU B2118      33.266  -1.806  24.084  1.00 26.38        N
ATOM   1813  CA  GLU B2118      34.331  -1.920  25.070  1.00 31.02        C
ATOM   1814  CB  GLU B2118      34.781  -3.373  25.209  1.00 33.06        C
ATOM   1815  CG  GLU B2118      33.888  -4.220  26.082  1.00 38.01        C
ATOM   1816  CD  GLU B2118      34.094  -3.939  27.552  1.00 42.42        C
ATOM   1817  OE1 GLU B2118      33.776  -2.816  27.998  1.00 44.59        O
ATOM   1818  OE2 GLU B2118      34.584  -4.845  28.262  1.00 45.87        O
ATOM   1819  C   GLU B2118      35.482  -1.091  24.533  1.00 32.66        C
ATOM   1820  O   GLU B2118      35.880  -0.108  25.197  1.00 35.23        O
ATOM   1821  OXT GLU B2118      35.958  -1.442  23.431  1.00 32.94        O
TER    1822      GLU B2118
ATOM   1823  CB  MET C3003      37.039   0.395  12.081  1.00 32.22        C
ATOM   1824  CG  MET C3003      37.297  -0.447  10.845  1.00 36.68        C
ATOM   1825  SD  MET C3003      38.483   0.306   9.716  1.00 46.15        S
ATOM   1826  CE  MET C3003      37.454   1.490   8.876  1.00 42.14        C
ATOM   1827  C   MET C3003      34.864  -0.764  12.331  1.00 25.86        C
ATOM   1828  O   MET C3003      34.821  -1.903  11.864  1.00 26.11        O
ATOM   1829  N   MET C3003      36.772  -1.388  13.778  1.00 27.93        N
ATOM   1830  CA  MET C3003      36.090  -0.264  13.082  1.00 27.91        C
ATOM   1831  N   ILE C3004      33.866   0.097  12.219  1.00 23.54        N
ATOM   1832  CA  ILE C3004      32.655  -0.247  11.500  1.00 21.79        C
ATOM   1833  CB  ILE C3004      31.503   0.697  11.890  1.00 22.07        C
ATOM   1834  CG2 ILE C3004      30.259   0.377  11.063  1.00 20.08        C
ATOM   1835  CG1 ILE C3004      31.212   0.560  13.391  1.00 21.69        C
ATOM   1836  CD1 ILE C3004      30.181   1:530  13.913  1.00 20.52        C
ATOM   1837  C   ILE C3004      32.942  -0.109  10.005  1.00 22.42        C
ATOM   1838  O   ILE C3004      33.595   0.843   9.578  1.00 21.61        O
ATOM   1839  N   VAL C3005      32.483  -1.071   9.212  1.00 21.57        N
ATOM   1840  CA  VAL C3005      32.692  -0.999   7.777  1.00 22.56        C
ATOM   1841  CB  VAL C3005      33.600  -2.145   7.265  1.00 24.27        C
ATOM   1842  CG1 VAL C3005      34.954  -2.087   7.975  1.00 23.54        C
ATOM   1843  CG2 VAL C3005      32.924  -3.487   7.478  1.00 25.12        C
ATOM   1844  C   VAL C3005      31.349  -1.036   7.049  1.00 22.07        C
ATOM   1845  O   VAL C3005      31.297  -0.988   5.823  1.00 22.90        O
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ATOM   1846  N   GLY C3006      30.264  -1.106   7.814  1.00 19.77           N
ATOM   1847  CA  GLY C3006      28.946  -1.124   7.207  1.00 18.90           C
ATOM   1848  C   GLY C3006      27.840  -1.111   8.240  1.00 18.66           C
ATOM   1849  O   GLY C3006      28.039  -1.542   9.375  1.00 19.40           O
ATOM   1850  N   HIS C3007      26.679  -0.595   7.849  1.00 17.60           N
ATOM   1851  CA  HIS C3007      25.517  -0.544   8.726  1.00 17.25           C
ATOM   1852  CB  HIS C3007      25.541   0.709   9.615  1.00 17.61           C
ATOM   1853  CG  HIS C3007      24.315   0.867  10.469  1.00 17.57           C
ATOM   1854  CD2 HIS C3007      23.615   1.967  10.834  1.00 17.24           C
ATOM   1855  ND1 HIS C3007      23.686  -0.203  11.072  1.00 17.16           N
ATOM   1856  CE1 HIS C3007      22.651   0.231  11.771  1.00 17.81           C
ATOM   1857  NE2 HIS C3007      22.585   1.545  11.644  1.00 18.60           N
ATOM   1858  C   HIS C3007      24.264  -0.540   7.867  1.00 17.20           C
ATOM   1859  O   HIS C3007      24.138   0.249   6.924  1.00 17.44           O
ATOM   1860  N   GLY C3008      23.335  -1.427   8.187  1.00 16.34           N
ATOM   1861  CA  GLY C3008      22.111  -1.484   7.416  1.00 18.39           C
ATOM   1862  C   GLY C3008      20.925  -1.924   8.242  1.00 19.04           C
ATOM   1863  O   GLY C3008      21.060  -2.752   9.145  1.00 19.03           O
ATOM   1864  N   ILE C3009      19.761  -1.352   7.944  1.00 18.83           N
ATOM   1865  CA  ILE C3009      18.542  -1.718   8.640  1.00 19.42           C
ATOM   1866  CB  ILE C3009      18.047  -0.598   9.594  1.00 18.51           C
ATOM   1867  CG2 ILE C3009      19.197  -0.150  10.493  1.00 20.36           C
ATOM   1868  CG1 ILE C3009      17.505   0.585   8.797  1.00 17.23           C
ATOM   1869  CD1 ILE C3009      16.778   1.592   9.643  1.00 13.66           C
ATOM   1870  C   ILE C3009      17.473  -1.992   7.602  1.00 18.70           C
ATOM   1871  O   ILE C3009      17.647  -1.685   6.427  1.00 15.95           O
ATOM   1872  N   ASP C3010      16.369  -2.585   8.037  1.00 19.75           N
ATOM   1873  CA  ASP C3010      15.278  -2.882   7.129  1.00 20.22           C
ATOM   1874  CB  ASP C3010      15.550  -4.184   6.358  1.00 20.94           C
ATOM   1875  CG  ASP C3010      14.474  -4.487   5.310  1.00 22.14           C
ATOM   1876  OD1 ASP C3010      14.480  -3.844   4.236  1.00 22.44           O
ATOM   1877  OD2 ASP C3010      13.617  -5.363   5.561  1.00 20.92           O
ATOM   1878  C   ASP C3010      14.007  -3.047   7.932  1.00 21.28           C
ATOM   1879  O   ASP C3010      14.042  -3.500   9.078  1.00 21.26           O
ATOM   1880  N   ILE C3011      12.893  -2.646   7.333  1.00 19.66           N
ATOM   1881  CA  ILE C3011      11.588  -2.813   7.949  1.00 20.09           C
ATOM   1882  CB  ILE C3011      10.959  -1.476   8.400  1.00 20.39           C
ATOM   1883  CG2 ILE C3011      10.910  -0.478   7.234  1.00 16.27           C
ATOM   1884  CG1 ILE C3011       9.561  -1.753   8.971  1.00 20.84           C
ATOM   1885  CD1 ILE C3011       9.081  -0.712   9.969  1.00 21.63           C
ATOM   1886  C   ILE C3011      10.777  -3.440   6.825  1.00 21.21           C
ATOM   1887  O   ILE C3011      10.866  -3.006   5.678  1.00 21.49           O
ATOM   1888  N   GLU C3012      10.018  -4.481   7.140  1.00 21.79           N
ATOM   1889  CA  GLU C3012       9.249  -5.174   6.120  1.00 23.44           C
ATOM   1890  CB  GLU C3012      10.024  -6.415   5.656  1.00 24.63           C
ATOM   1891  CG  GLU C3012       9.269  -7.309   4.667  1.00 27.74           C
ATOM   1892  CD  GLU C3012       9.351  -6.812   3.237  1.00 27.70           C
ATOM   1893  OE1 GLU C3012       9.663  -5.626   3.032  1.00 28.89           O
ATOM   1894  OE2 GLU C3012       9.091  -7.612   2.314  1.00 31.17           O
ATOM   1895  C   GLU C3012       7.873  -5.583   6.625  1.00 23.57           C
ATOM   1896  O   GLU C3012       7.750  -6.258   7.647  1.00 22.12           O
ATOM   1897  N   GLU C3013       6.840  -5.170   5.904  1.00 23.45           N
ATOM   1898  CA  GLU C3013       5.491  -5.519   6.286  1.00 24.76           C
ATOM   1899  CB  GLU C3013       4.479  -4.613   5.571  1.00 29.22           C
ATOM   1900  CG  GLU C3013       3.662  -3.731   6.531  1.00 33.17           C
ATOM   1901  CD  GLU C3013       3.915  -2.242   6.349  1.00 38.85           C
ATOM   1902  OE1 GLU C3013       3.660  -1.719   5.238  1.00 44.44           O
ATOM   1903  OE2 GLU C3013      4.359  -1.586   7.318  1.00 38.04           O
ATOM   1904  C   GLU C3013      5.238  -6.993   5.963  1.00 24.30           C
ATOM   1905  O   GLU C3013      5.643  -7.502   4.910  1.00 21.31           O
ATOM   1906  N   LEU C3014      4.599  -7.685   6.898  1.00 22.97           N
ATOM   1907  CA  LEU C3014      4.287  -9.092   6.712  1.00 26.19           C
ATOM   1908  CB  LEU C3014      3.531  -9.613   7.939  1.00 28.12           C
ATOM   1909  CG  LEU C3014      4.251 -10.630   8.829  1.00 31.98           C
ATOM   1910  CD1 LEU C3014      5.647 -10.144   9.191  1.00 31.03           C
ATOM   1911  CD2 LEU C3014      3.414 -10.868  10.083  1.00 33.69           C
ATOM   1912  C   LEU C3014      3.453  -9.308   5.439  1.00 25.44           C
ATOM   1913  O   LEU C3014      3.554 -10.345   4.793  1.00 25.78           O
ATOM   1914  N   ALA C3015      2.644  -8.320   5.073  1.00 24.83           N
ATOM   1915  CA  ALA C3015      1.801  -8.438   3.879  1.00 27.12           C
ATOM   1916  CB  ALA C3015      0.915  -7.206   3.747  1.00 27.24           C
ATOM   1917  C   ALA C3015      2.592  -8.659   2.584  1.00 27.01           C
ATOM   1918  O   ALA C3015      2.215  -9.497   1.761  1.00 26.98           O
ATOM   1919  N   SER C3016      3.683  -7.916   2.399  1.00 26.19           N
ATOM   1920  CA  SER C3016      4.498  -8.062   1.192  1.00 27.18           C
ATOM   1921  CB  SER C3016      5.706  -7.117   1.232  1.00 27.62           C
ATOM   1922  OG  SER C3016      5.324  -5.799   1.573  1.00 28.51           O
ATOM   1923  C   SER C3016      4.997  -9.502   1.072  1.00 27.53           C
ATOM   1924  O   SER C3016      5.069 -10.062  -0.027  1.00 26.07           O
ATOM   1925  N   ILE C3017      5.343 -10.094   2.212  1.00 26.80           N
ATOM   1926  CA  ILE C3017      5.841 -11.464   2.248  1.00 25.88           C
ATOM   1927  CB  ILE C3017      6.519 -11.771   3.613  1.00 25.28           C
ATOM   1928  CG2 ILE C3017      6.909 -13.241   3.688  1.00 23.81           C
ATOM   1929  CG1 ILE C3017      7.739 -10.863   3.808  1.00 24.39           C
ATOM   1930  CD1 ILE C3017      8.815 -11.007   2.735  1.00 24.49           C
ATOM   1931  C   ILE C3017      4.698 -12.456   2.019  1.00 26.06           C
ATOM   1932  O   ILE C3017      4.830 -13.408   1.253  1.00 26.57           O
ATOM   1933  N   GLU C3018      3.576 -12.235   2.690  1.00 26.59           N
ATOM   1934  CA  GLU C3018      2.429 -13.122   2.534  1.00 28.88           C
ATOM   1935  CB  GLU C3018      1.284 -12.645   3.427  1.00 29.66           C
ATOM   1936  CG  GLU C3018      1.688 -12.504   4.884  1.00 32.78           C
ATOM   1937  CD  GLU C3018      0.656 -11.783   5.722  1.00 34.19           C
ATOM   1938  OE1 GLU C3018     -0.010 -10.865   5.190  1.00 34.18           O
ATOM   1939  OE2 GLU C3018      0.525 -12.118   6.920  1.00 35.99           O
ATOM   1940  C   GLU C3018      1.983 -13.163   1.067  1.00 29.36           C
ATOM   1941  O   GLU C3018      1.763 -14.239   0.507  1.00 28.97           O
ATOM   1942  N   SER C3019      1.867 -11.994   0.440  1.00 28.95           N
ATOM   1943  CA  SER C3019      1.454 -11.931  -0.957  1.00 29.90           C
ATOM   1944  CB  SER C3019      1.285 -10.476  -1.410  1.00 30.07           C
ATOM   1945  OG  SER C3019      2.542  -9.866  -1.632  1.00 33.15           O
ATOM   1946  C   SER C3019      2.489 -12.623  -1.837  1.00 30.43           C
ATOM   1947  O   SER C3019      2.138 -13.362  -2.755  1.00 30.07           O
ATOM   1948  N   ALA C3020      3.766 -12.391  -1.549  1.00 29.14           N
ATOM   1949  CA  ALA C3020      4.842 -12.994  -2.327  1.00 30.13           C
ATOM   1950  CB  ALA C3020      6.191 -12.465  -1.847  1.00 31.02           C
ATOM   1951  C   ALA C3020      4.834 -14.527  -2.269  1.00 30.69           C
ATOM   1952  O   ALA C3020      5.111 -15.198  -3.264  1.00 30.30           O
ATOM   1953  N   VAL C3021      4.530 -15.082  -1.103  1.00 30.94           N
ATOM   1954  CA  VAL C3021      4.501 -16.532  -0.959  1.00 33.03           C
ATOM   1955  CB  VAL C3021      4.172 -16.950   0.489  1.00 32.04           C
ATOM   1956  CG1 VAL C3021      3.982 -18.465   0.565  1.00 31.51           C
ATOM   1957  CG2 VAL C3021      5.292 -16.521   1.414  1.00 31.14           C
ATOM   1958  C   VAL C3021      3.458 -17.135  -1.896  1.00 35.03           C
ATOM   1959  O   VAL C3021      3.736 -18.094  -2.616  1.00 36.27           O
ATOM   1960  N   THR C3022       2.263 -16.552  -1.889  1.00 36.26           N
ATOM   1961  CA  THR C3022       1.166 -17.019  -2.726  1.00 38.71           C
ATOM   1962  CB  THR C3022      -0.142 -16.274  -2.371  1.00 38.89           C
ATOM   1963  OG1 THR C3022      -0.532 -16.613  -1.034  1.00 39.61           O
ATOM   1964  CG2 THR C3022      -1.262 -16.654  -3.336  1.00 37.67           C
ATOM   1965  C   THR C3022       1.458 -16.836  -4.214  1.00 40.67           C
ATOM   1966  O   THR C3022       1.325 -17.772  -5.005  1.00 40.21           O
ATOM   1967  N   ARG C3023       1.859 -15.626  -4.587  1.00 42.70           N
ATOM   1968  CA  ARG C3023       2.161 -15.303  -5.974  1.00 46.22           C
ATOM   1969  CB  ARG C3023       2.861 -13.944  -6.037  1.00 46.79           C
ATOM   1970  CG  ARG C3023       2.842 -13.278  -7.396  1.00 47.31           C
ATOM   1971  CD  ARG C3023       3.264 -11.827  -7.269  1.00 47.58           C
ATOM   1972  NE  ARG C3023       4.544 -11.695  -6.577  1.00 48.02           N
ATOM   1973  CZ  ARG C3023       4.741 -10.924  -5.511  1.00 48.91           C
ATOM   1974  NH1 ARG C3023       3.736 -10.214  -5.008  1.00 46.67           N
ATOM   1975  NH2 ARG C3023       5.943 -10.861  -4.948  1.00 48.13           N
ATOM   1976  C   ARG C3023       3.020 -16.391  -6.616  1.00 47.90           C
ATOM   1977  O   ARG C3023       2.684 -16.906  -7.681  1.00 49.41           O
ATOM   1978  N   HIS C3024       4.129 -16.737  -5.968  1.00 49.64           N
ATOM   1979  CA  HIS C3024       5.019 -17.787  -6.458  1.00 50.08           C
ATOM   1980  CB  HIS C3024       6.303 -17.193  -7.045  1.00 51.60           C
ATOM   1981  CG  HIS C3024       6.100 -16.464  -8.338  1.00 53.54           C
ATOM   1982  CD2 HIS C3024       6.507 -16.754  -9.597  1.00 53.69           C
ATOM   1983  ND1 HIS C3024       5.397 -15.282  -8.426  1.00 54.78           N
ATOM   1984  CE1 HIS C3024       5.379 -14.875  -9.683  1.00 53.97           C
ATOM   1985  NE2 HIS C3024       6.045 -15.750 -10.414  1.00 53.74           N
ATOM   1986  C   HIS C3024       5.370 -18.720  -5.304  1.00 50.32           C
ATOM   1987  O   HIS C3024       6.030 -18.314  -4.347  1.00 50.15           O
ATOM   1988  N   GLU C3025       4.929 -19.971  -5.394  1.00 49.54           N
ATOM   1989  CA  GLU C3025       5.197 -20.937  -4.335  1.00 49.18           C
ATOM   1990  CB  GLU C3025       4.507 -22.270  -4.632  1.00 52.19           C
ATOM   1991  CG  GLU C3025       4.778 -23.331  -3.575  1.00 55.07           C
ATOM   1992  CD  GLU C3025       4.269 -24.694  -3.972  1.00 57.92           C
ATOM   1993  OE1 GLU C3025       3.033 -24.870  -4.053  1.00 58.55           O
ATOM   1994  OE2 GLU C3025       5.111 -25.590  -4.206  1.00 59.67           O
ATOM   1995  C   GLU C3025       6.685 -21.182  -4.118  1.00 46.90           C
ATOM   1996  O   GLU C3025       7.087 -21.711  -3.084  1.00 47.27           O
ATOM   1997  N   GLY C3026       7.502 -20.801  -5.092  1.00 44.54           N
ATOM   1998  CA  GLY C3026       8.933 -20.997  -4.956  1.00 41.90           C
ATOM   1999  C   GLY C3026       9.636 -19.811  -4.320  1.00 40.26           C
ATOM   2000  O   GLY C3026      10.867 -19.768  -4.265  1.00 39.86           O
ATOM   2001  N   PHE C3027       8.860 -18.842  -3.841  1.00 37.59           N
ATOM   2002  CA  PHE C3027       9.434 -17.655  -3.217  1.00 35.31           C
ATOM   2003  CB  PHE C3027       8.323 -16.715  -2.738  1.00 34.09           C
ATOM   2004  CG  PHE C3027       8.832 -15.491  -2.031  1.00 33.77           C
ATOM   2005  CD1 PHE C3027       9.633 -14.569  -2.700  1.00 33.43           C
ATOM   2006  CD2 PHE C3027       8.543 -15.277  -0.687  1.00 32.68           C
ATOM   2007  CE1 PHE C3027      10.141 -13.450  -2.042  1.00 32.28           C
ATOM   2008  CE2 PHE C3027       9.045 -14.163  -0.016  1.00 33.06           C
ATOM   2009  CZ  PHE C3027       9.847 -13.248  -0.696  1.00 33.30           C
ATOM   2010  C   PHE C3027      10.331 -18.032  -2.042  1.00 34.03           C
ATOM   2011  O   PHE C3027      11.511 -17.688  -2.019  1.00 34.88           O
ATOM   2012  N   ALA C3028       9.767 -18.743  -1.071  1.00 33.39           N
ATOM   2013  CA  ALA C3028      10.516 -19.159   0.109  1.00 34.32           C
ATOM   2014  CB  ALA C3028       9.651 -20.053   0.987  1.00 33.64           C
ATOM   2015  C   ALA C3028      11.799 -19.885  -0.263  1.00 34.75           C
ATOM   2016  O   ALA C3028      12.873 -19.572   0.257  1.00 34.90           O
ATOM   2017  N    LYS C3029      11.683 -20.854  -1.166  1.00 33.73          N
ATOM   2018  CA   LYS C3029      12.831 -21.636  -1.605  1.00 32.87          C
ATOM   2019  CB   LYS C3029      12.396 -22.671  -2.650  1.00 32.28          C
ATOM   2020  CG   LYS C3029      11.313 -23.617  -2.157  0.05 32.40          C
ATOM   2021  CD   LYS C3029      10.821 -24.537  -3.261  0.05 32.28          C
ATOM   2022  CE   LYS C3029       9.721 -25.456  -2.753  0.05 32.20          C
ATOM   2023  NZ   LYS C3029       9.160 -26.313  -3.833  0.05 32.15          N
ATOM   2024  C    LYS C3029      13.910 -20.735  -2.181  1.00 32.70          C
ATOM   2025  O    LYS C3029      15.100 -21.016  -2.048  1.00 33.44          O
ATOM   2026  N    ARG C3030      13.498 -19.643  -2.814  1.00 32.85          N
ATOM   2027  CA   ARG C3030      14.458 -18.714  -3.397  1.00 32.53          C
ATOM   2028  CB   ARG C3030      13.796 -17.877  -4.497  0.05 32.58          C
ATOM   2029  CG   ARG C3030      13.442 -18.670  -5.747  0.05 32.72          C
ATOM   2030  CD   ARG C3030      13.135 -17.752  -6.922  0.05 32.87          C
ATOM   2031  NE   ARG C3030      11.916 -16.973  -6.722  0.05 33.03          N
ATOM   2032  CZ   ARG C3030      10.691 -17.490  -6.720  0.05 33.10          C
ATOM   2033  NH1  ARG C3030      10.517 -18.791  -6.908  0.05 33.16          N
ATOM   2034  NH2  ARG C3030       9.639 -16.705  -6.531  0.05 33.04          N
ATOM   2035  C    ARG C3030      15.080 -17.794  -2.351  1.00 32.30          C
ATOM   2036  O    ARG C3030      16.242 -17.408  -2.470  1.00 32.85          O
ATOM   2037  N    VAL C3031      14.303 -17.455  -1.325  1.00 31.53          N
ATOM   2038  CA   VAL C3031      14.755 -16.574  -0.245  1.00 30.10          C
ATOM   2039  CB   VAL C3031      13.541 -15.905   0.469  1.00 30.44          C
ATOM   2040  CG1  VAL C3031      14.007 -15.140   1.701  1.00 31.92          C
ATOM   2041  CG2  VAL C3031      12.824 -14.967  -0.484  1.00 31.35          C
ATOM   2042  C    VAL C3031      15.576 -17.284   0.836  1.00 29.72          C
ATOM   2043  O    VAL C3031      16.475 -16.686   1.439  1.00 29.40          O
ATOM   2044  N    LEU C3032      15.259 -18.554   1.076  1.00 27.31          N
ATOM   2045  CA   LEU C3032      15.911 -19.338   2.119  1.00 25.97          C
ATOM   2046  CB   LEU C3032      14.839 -19.917   3.047  1.00 24.74          C
ATOM   2047  CG   LEU C3032      13.782 -18.943   3.572  1.00 22.82          C
ATOM   2048  CD1  LEU C3032      12.717 -19.708   4.361  1.00 23.17          C
ATOM   2049  CD2  LEU C3032      14.454 -17.893   4.452  1.00 21.55          C
ATOM   2050  C    LEU C3032      16.793 -20.485   1.630  1.00 27.28          C
ATOM   2051  O    LEU C3032      16.447 -21.187   0.676  1.00 28.34          O
ATOM   2052  N    THR C3033      17.924 -20.676   2.307  1.00 26.40          N
ATOM   2053  CA   THR C3033      18.847 -21.756   1.984  1.00 27.30          C
ATOM   2054  CB   THR C3033      20.149 -21.662   2.795  1.00 25.69          C
ATOM   2055  OG1  THR C3033      19.845 -21.820   4.186  1.00 26.34          O
ATOM   2056  CG2  THR C3033      20.835 -20.323   2.574  1.00 26.77          C
ATOM   2057  C    THR C3033      18.170 -23.062   2.385  1.00 27.70          C
ATOM   2058  O    THR C3033      17.061 -23.061   2.920  1.00 28.12          O
ATOM   2059  N    ALA C3034      18.853 -24.174   2.145  1.00 28.90          N
ATOM   2060  CA   ALA C3034      18.314 -25.484   2.493  1.00 29.05          C
ATOM   2061  CB   ALA C3034      19.283 -26.572   2.062  1.00 29.42          C
ATOM   2062  C    ALA C3034      18.047 -25.594   3.990  1.00 28.60          C
ATOM   2063  O    ALA C3034      16.965 -26.008   4.403  1.00 29.51          O
ATOM   2064  N    LEU C3035      19.029 -25.218   4.805  1.00 28.04          N
ATOM   2065  CA   LEU C3035      18.869 -25.310   6.249  1.00 27.61          C
ATOM   2066  CB   LEU C3035      20.187 -24.964   6.952  1.00 29.31          C
ATOM   2067  CG   LEU C3035      20.522 -25.809   8.190  1.00 31.59          C
ATOM   2068  CD1  LEU C3035      20.472 -27.297   7.821  1.00 32.29          C
ATOM   2069  CD2  LEU C3035      21.902 -25.438   8.727  1.00 30.00          C
ATOM   2070  C    LEU C3035      17.740 -24.410   6.747  1.00 27.52          C
ATOM   2071  O    LEU C3035      16.922 -24.832   7.571  1.00 26.23          O
ATOM   2072  N    GLU C3036      17.688 -23.176   6.247  1.00 27.39          N
ATOM   2073  CA   GLU C3036      16.636 -22.240   6.649  1.00 27.23          C
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ATOM   2074  CB  GLU C3036      16.849 -20.877   5.981  1.00 25.56          C
ATOM   2075  CG  GLU C3036      17.834 -19.978   6.707  1.00 22.65          C
ATOM   2076  CD  GLU C3036      18.256 -18.777   5.880  1.00 23.21          C
ATOM   2077  OE1 GLU C3036      18.735 -17.784   6.469  1.00 22.56          O
ATOM   2078  OE2 GLU C3036      18.124 -18.825   4.638  1.00 24.80          O
ATOM   2079  C   GLU C3036      15.258 -22.793   6.278  1.00 28.00          C
ATOM   2080  O   GLU C3036      14.306 -22.668   7.047  1.00 27.30          O
ATOM   2081  N   MET C3037      15.160 -23.401   5.098  1.00 28.24          N
ATOM   2082  CA  MET C3037      13.897 -23.979   4.641  1.00 30.24          C
ATOM   2083  CB  MET C3037      14.051 -24.593   3.247  1.00 31.74          C
ATOM   2084  CG  MET C3037      13.885 -23.605   2.102  1.00 32.56          C
ATOM   2085  SD  MET C3037      12.289 -22.761   2.156  1.00 37.45          S
ATOM   2086  CE  MET C3037      11.153 -24.108   1.753  1.00 36.07          C
ATOM   2087  C   MET C3037      13.411 -25.049   5.608  1.00 31.16          C
ATOM   2088  O   MET C3037      12.222 -25.124   5.920  1.00 30.55          O
ATOM   2089  N   GLU C3038      14.336 -25.882   6.076  1.00 31.23          N
ATOM   2090  CA  GLU C3038      13.992 -26.936   7.018  1.00 31.35          C
ATOM   2091  CB  GLU C3038      15.257 -27.635   7.525  0.05 30.95          C
ATOM   2092  CG  GLU C3038      15.478 -29.023   6.948  0.05 30.58          C
ATOM   2093  CD  GLU C3038      16.721 -29.692   7.504  0.05 30.41          C
ATOM   2094  OE1 GLU C3038      16.840 -29.795   8.744  0.05 30.03          O
ATOM   2095  OE2 GLU C3038      17.578 -30.118   6.702  0.05 30.15          O
ATOM   2096  C   GLU C3038      13.235 -26.330   8.191  1.00 31.53          C
ATOM   2097  O   GLU C3038      12.255 -26.897   8.663  1.00 32.15          O
ATOM   2098  N   ARG C3039      13.697 -25.176   8.664  1.00 32.00          N
ATOM   2099  CA  ARG C3039      13.046 -24.496   9.781  1.00 33.21          C
ATOM   2100  CB  ARG C3039      13.928 -23.353  10.289  1.00 34.11          C
ATOM   2101  CG  ARG C3039      13.317 -22.548  11.434  1.00 37.68          C
ATOM   2102  CD  ARG C3039      13.189 -23.377  12.704  1.00 39.59          C
ATOM   2103  NE  ARG C3039      12.565 -22.626  13.791  1.00 41.92          N
ATOM   2104  CZ  ARG C3039      12.195 -23.159  14.952  1.00 43.02          C
ATOM   2105  NH1 ARG C3039      12.384 -24.450  15.183  1.00 43.57          N
ATOM   2106  NH2 ARG C3039      11.625 -22.402  15.881  1.00 44.00          N
ATOM   2107  C   ARG C3039      11.692 -23.939   9.339  1.00 32.70          C
ATOM   2108  O   ARG C3039      10.674 -24.130  10.005  1.00 31.81          O
ATOM   2109  N   PHE C3040      11.699 -23.240   8.210  1.00 32.86          N
ATOM   2110  CA  PHE C3040      10.489 -22.646   7.653  1.00 33.52          C
ATOM   2111  CB  PHE C3040      10.778 -22.128   6.242  1.00 32.08          C
ATOM   2112  CG  PHE C3040       9.569 -21.604   5.528  1.00 32.50          C
ATOM   2113  CD1 PHE C3040       9.012 -20.380   5.880  1.00 31.27          C
ATOM   2114  CD2 PHE C3040       8.980 -22.340   4.503  1.00 32.76          C
ATOM   2115  CE1 PHE C3040       7.882 -19.895   5.222  1.00 31.92          C
ATOM   2116  CE2 PHE C3040       7.851 -21.865   3.839  1.00 33.27          C
ATOM   2117  CZ  PHE C3040       7.301 -20.637   4.201  1.00 31.45          C
ATOM   2118  C   PHE C3040       9.367 -23.680   7.595  1.00 33.45          C
ATOM   2119  O   PHE C3040       8.264 -23.457   8.100  1.00 33.35          O
ATOM   2120  N   THR C3041       9.669 -24.819   6.983  1.00 34.68          N
ATOM   2121  CA  THR C3041       8.706 -25.898   6.828  1.00 35.57          C
ATOM   2122  CB  THR C3041       9.286 -27.002   5.923  1.00 36.24          C
ATOM   2123  OG1 THR C3041       9.517 -26.464   4.616  1.00 38.04          O
ATOM   2124  CG2 THR C3041       8.324 -28.170   5.813  1.00 36.60          C
ATOM   2125  C   THR C3041       8.232 -26.517   8.143  1.00 36.09          C
ATOM   2126  O   THR C3041       7.084 -26.945   8.247  1.00 37.27          O
ATOM   2127  N   SER C3042       9.100 -26.560   9.147  1.00 36.67          N
ATOM   2128  CA  SER C3042       8.718 -27.142  10.427  1.00 37.38          C
ATOM   2129  CB  SER C3042       9.952 -27.377  11.303  1.00 38.44          C
ATOM   2130  OG  SER C3042      10.391 -26.172  11.904  1.00 39.31          O
ATOM   2131  C    SER C3042       7.744 -26.230  11.157  1.00 37.81           C
ATOM   2132  O    SER C3042       7.010 -26.671  12.042  1.00 38.07           O
ATOM   2133  N    LEU C3043       7.740 -24.956  10.781  1.00 37.43           N
ATOM   2134  CA   LEU C3043       6.860 -23.969  11.400  1.00 37.02           C
ATOM   2135  CB   LEU C3043       7.549 -22.600  11.428  1.00 37.05           C
ATOM   2136  CG   LEU C3043       8.597 -22.327  12.513  1.00 37.93           C
ATOM   2137  CD1  LEU C3043       9.573 -23.470  12.628  1.00 39.39           C
ATOM   2138  CD2  LEU C3043       9.328 -21.040  12.177  1.00 38.02           C
ATOM   2139  C    LEU C3043       5.526 -23.851  10.666  1.00 37.04           C
ATOM   2140  O    LEU C3043       5.389 -24.291   9.522  1.00 37.65           O
ATOM   2141  N    LYS C3044       4.542 -23.250  11.325  1.00 36.12           N
ATOM   2142  CA   LYS C3044       3.236 -23.075  10.707  1.00 35.63           C
ATOM   2143  CB   LYS C3044       2.313 -24.246  11.072  1.00 37.63           C
ATOM   2144  CG   LYS C3044       1.985 -24.356  12.555  1.00 40.09           C
ATOM   2145  CD   LYS C3044       0.926 -25.432  12.813  1.00 42.38           C
ATOM   2146  CE   LYS C3044       1.397 -26.813  12.365  1.00 42.85           C
ATOM   2147  NZ   LYS C3044       0.339 -27.847  12.550  1.00 43.11           N
ATOM   2148  C    LYS C3044       2.584 -21.753  11.111  1.00 33.57           C
ATOM   2149  O    LYS C3044       2.990 -21.116  12.086  1.00 33.02           O
ATOM   2150  N    GLY C3045       1.579 -21.345  10.339  1.00 31.64           N
ATOM   2151  CA   GLY C3045       0.860 -20.115  10.618  1.00 29.90           C
ATOM   2152  C    GLY C3045       1.689 -18.844  10.666  1.00 28.38           C
ATOM   2153  O    GLY C3045       2.643 -18.676   9.915  1.00 28.13           O
ATOM   2154  N    ARG C3046       1.299 -17.946  11.564  1.00 28.66           N
ATOM   2155  CA   ARG C3046       1.957 -16.661  11.758  1.00 27.23           C
ATOM   2156  CB   ARG C3046       1.279 -15.920  12.912  0.05 27.45           C
ATOM   2157  CG   ARG C3046      -0.235 -15.860  12.769  0.05 27.80           C
ATOM   2158  CD   ARG C3046      -0.912 -15.403  14.048  0.05 28.08           C
ATOM   2159  NE   ARG C3046      -2.364 -15.526  13.962  0.05 28.35           N
ATOM   2160  CZ   ARG C3046      -3.199 -15.249  14.959  0.05 28.51           C
ATOM   2161  NH1  ARG C3046      -4.506 -15.394  14.792  0.05 28.59           N
ATOM   2162  NH2  ARG C3046      -2.727 -14.831  16.127  0.05 28.63           N
ATOM   2163  C    ARG C3046       3.451 -16.827  12.041  1.00 26.66           C
ATOM   2164  O    ARG C3046       4.276 -16.065  11.537  1.00 23.83           O
ATOM   2165  N    ARG C3047       3.797 -17.824  12.847  1.00 26.74           N
ATOM   2166  CA   ARG C3047       5.197 -18.068  13.172  1.00 28.45           C
ATOM   2167  CB   ARG C3047       5.330 -19.223  14.167  1.00 30.78           C
ATOM   2168  CG   ARG C3047       4.824 -18.919  15.567  1.00 36.74           C
ATOM   2169  CD   ARG C3047       5.548 -19.793  16.580  1.00 40.75           C
ATOM   2170  NE   ARG C3047       6.991 -19.561  16.540  1.00 43.99           N
ATOM   2171  CZ   ARG C3047       7.894 -20.341  17.126  1.00 45.84           C
ATOM   2172  NH1  ARG C3047       7.508 -21.417  17.803  1.00 47.05           N
ATOM   2173  NH2  ARG C3047       9.184 -20.046  17.036  1.00 46.26           N
ATOM   2174  C    ARG C3047       6.004 -18.396  11.924  1.00 26.96           C
ATOM   2175  O    ARG C3047       7.171 -18.019  11.809  1.00 27.18           O
ATOM   2176  N    GLN C3048       5.385 -19.108  10.989  1.00 25.16           N
ATOM   2177  CA   GLN C3048       6.080 -19.474   9.765  1.00 24.64           C
ATOM   2178  CB   GLN C3048       5.262 -20.489   8.964  1.00 24.71           C
ATOM   2179  CG   GLN C3048       6.087 -21.176   7.884  1.00 24.87           C
ATOM   2180  CD   GLN C3048       5.261 -22.028   6.947  1.00 27.10           C
ATOM   2181  OE1  GLN C3048       5.757 -23.007   6.393  1.00 28.27           O
ATOM   2182  NE2  GLN C3048       4.000 -21.650   6.747  1.00 27.28           N
ATOM   2183  C    GLN C3048       6.342 -18.240   8.907  1.00 23.81           C
ATOM   2184  O    GLN C3048       7.441 -18.064   8.376  1.00 22.00           O
ATOM   2185  N    ILE C3049       5.323 -17.394   8.767  1.00 23.83           N
ATOM   2186  CA   ILE C3049       5.449 -16.174   7.972  1.00 22.84           C
ATOM   2187  CB   ILE C3049       4.099 -15.428   7.889  1.00 23.39           C
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ATOM   2188  CG2 ILE C3049       4.270 -14.110   7.123  1.00 20.78           C
ATOM   2189  CG1 ILE C3049       3.068 -16.317   7.194  1.00 25.01           C
ATOM   2190  CD1 ILE C3049       1.637 -15.812   7.313  1.00 28.28           C
ATOM   2191  C   ILE C3049       6.492 -15.254   8.596  1.00 22.76           C
ATOM   2192  O   ILE C3049       7.334 -14.695   7.901  1.00 22.64           O
ATOM   2193  N   GLU C3050       6.426 -15.119   9.917  1.00 23.06           N
ATOM   2194  CA  GLU C3050       7.347 -14.287  10.685  1.00 23.40           C
ATOM   2195  CB  GLU C3050       7.023 -14.436  12.169  1.00 27.99           C
ATOM   2196  CG  GLU C3050       7.336 -13.229  13.014  1.00 34.34           C
ATOM   2197  CD  GLU C3050       6.633 -11.997  12.501  1.00 37.30           C
ATOM   2198  OE1 GLU C3050       7.273 -11.233  11.752  1.00 38.54           O
ATOM   2199  OE2 GLU C3050       5.437 -11.807  12.825  1.00 38.13           O
ATOM   2200  C   GLU C3050       8.798 -14.707  10.429  1.00 22.91           C
ATOM   2201  O   GLU C3050       9.675 -13.863  10.212  1.00 19.78           O
ATOM   2202  N   TYR C3051       9.042 -16.018  10.451  1.00 20.98           N
ATOM   2203  CA  TYR C3051      10.379 -16.549  10.218  1.00 20.96           C
ATOM   2204  CB  TYR C3051      10.376 -18.087  10.286  1.00 20.94           C
ATOM   2205  CG  TYR C3051      11.727 -18.710   9.996  1.00 21.84           C
ATOM   2206  CD1 TYR C3051      12.091 -19.072   8.699  1.00 21.88           C
ATOM   2207  CE1 TYR C3051      13.365 -19.563   8.420  1.00 22.08           C
ATOM   2208  CD2 TYR C3051      12.675 -18.864  11.011  1.00 24.22           C
ATOM   2209  CE2 TYR C3051      13.947 -19.353  10.743  1.00 22.50           C
ATOM   2210  CZ  TYR C3051      14.286 -19.695   9.447  1.00 23.28           C
ATOM   2211  OH  TYR C3051      15.557 -20.142   9.181  1.00 26.17           O
ATOM   2212  C   TYR C3051      10.893 -16.093   8.863  1.00 21.41           C
ATOM   2213  O   TYR C3051      11.973 -15.508   8.764  1.00 20.67           O
ATOM   2214  N   LEU C3052      10.104 -16.357   7.823  1.00 20.18           N
ATOM   2215  CA  LEU C3052      10.468 -15.985   6.465  1.00 19.73           C
ATOM   2216  CB  LEU C3052       9.347 -16.399   5.502  1.00 20.90           C
ATOM   2217  CG  LEU C3052       9.488 -16.052   4.019  1.00 20.73           C
ATOM   2218  CD1 LEU C3052      10.837 -16.537   3.484  1.00 21.92           C
ATOM   2219  CD2 LEU C3052       8.329 -16.704   3.247  1.00 22.34           C
ATOM   2220  C   LEU C3052      10.725 -14.487   6.365  1.00 18.62           C
ATOM   2221  O   LEU C3052      11.745 -14.057   5.819  1.00 18.97           O
ATOM   2222  N   ALA C3053       9.805 -13.697   6.912  1.00 18.23           N
ATOM   2223  CA  ALA C3053       9.921 -12.238   6.888  1.00 19.28           C
ATOM   2224  CB  ALA C3053       8.670 -11.611   7.489  1.00 19.78           C
ATOM   2225  C   ALA C3053      11.164 -11.746   7.634  1.00 18.63           C
ATOM   2226  O   ALA C3053      11.835 -10.815   7.191  1.00 17.69           O
ATOM   2227  N   GLY C3054      11.464 -12.375   8.767  1.00 18.30           N
ATOM   2228  CA  GLY C3054      12.635 -11.989   9.534  1.00 18.14           C
ATOM   2229  C   GLY C3054      13.915 -12.303   8.776  1.00 19.55           C
ATOM   2230  O   GLY C3054      14.888 -11.545   8.831  1.00 18.40           O
ATOM   2231  N   ARG C3055      13.927 -13.421   8.060  1.00 18.30           N
ATOM   2232  CA  ARG C3055      15.112 -13.783   7.298  1.00 19.48           C
ATOM   2233  CB  ARG C3055      15.021 -15.239   6.839  1.00 20.53           C
ATOM   2234  CG  ARG C3055      15.815 -16.213   7.709  1.00 22.48           C
ATOM   2235  CD  ARG C3055      15.450 -16.093   9.181  1.00 26.13           C
ATOM   2236  NE  ARG C3055      16.291 -16.945  10.019  1.00 28.05           N
ATOM   2237  CZ  ARG C3055      16.240 -16.972  11.347  1.00 28.02           C
ATOM   2238  NH1 ARG C3055      15.389 -16.190  11.999  1.00 28.89           N
ATOM   2239  NH2 ARG C3055      17.034 -17.788  12.024  1.00 28.23           N
ATOM   2240  C   ARG C3055      15.283 -12.849   6.108  1.00 20.40           C
ATOM   2241  O   ARG C3055      16.396 -12.399   5.817  1.00 20.36           O
ATOM   2242  N   TRP C3056      14.182 -12.547   5.424  1.00 20.72           N
ATOM   2243  CA  TRP C3056      14.234 -11.641   4.280  1.00 22.18           C
ATOM   2244  CB  TRP C3056      12.837 -11.486   3.655  1.00 23.99           C
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ATOM   2245  CG  TRP C3056      12.716 -10.303   2.719  1.00 29.31           C
ATOM   2246  CD2 TRP C3056      12.723 -10.335   1.289  1.00 30.25           C
ATOM   2247  CE2 TRP C3056      12.609  -9.001   0.840  1.00 32.03           C
ATOM   2248  CE3 TRP C3056      12.821 -11.362   0.342  1.00 33.18           C
ATOM   2249  CD1 TRP C3056      12.598  -8.984   3.070  1.00 30.82           C
ATOM   2250  NE1 TRP C3056      12.532  -8.198   1.947  1.00 33.62           N
ATOM   2251  CZ2 TRP C3056      12.582  -8.665  -0.515  1.00 34.74           C
ATOM   2252  CZ3 TRP C3056      12.795 -11.029  -1.010  1.00 34.82           C
ATOM   2253  CH2 TRP C3056      12.679  -9.690  -1.425  1.00 36.26           C
ATOM   2254  C   TRP C3056      14.746 -10.284   4.760  1.00 20.86           C
ATOM   2255  O   TRP C3056      15.608  -9.670   4.134  1.00 18.98           O
ATOM   2256  N   SER C3057      14.206  -9.835   5.885  1.00 18.95           N
ATOM   2257  CA  SER C3057      14.586  -8.558   6.487  1.00 19.90           C
ATOM   2258  CB  SER C3057      13.755  -8.321   7.752  1.00 21.78           C
ATOM   2259  OG  SER C3057      14.067  -7.076   8.342  1.00 25.39           O
ATOM   2260  C   SER C3057      16.070  -8.506   6.841  1.00 18.84           C
ATOM   2261  O   SER C3057      16.767  -7.545   6.514  1.00 19.51           O
ATOM   2262  N   ALA C3058      16.550  -9.545   7.509  1.00 18.85           N
ATOM   2263  CA  ALA C3058      17.949  -9.611   7.917  1.00 18.94           C
ATOM   2264  CB  ALA C3058      18.182 -10.854   8.765  1.00 16.86           C
ATOM   2265  C   ALA C3058      18.912  -9.608   6.730  1.00 19.28           C
ATOM   2266  O   ALA C3058      19.955  -8.946   6.765  1.00 19.47           O
ATOM   2267  N   LYS C3059      18.567 -10.349   5.683  1.00 18.93           N
ATOM   2268  CA  LYS C3059      19.424 -10.432   4.507  1.00 19.60           C
ATOM   2269  CB  LYS C3059      18.965 -11.575   3.604  1.00 20.15           C
ATOM   2270  CG  LYS C3059      19.102 -12.925   4.271  1.00 17.40           C
ATOM   2271  CD  LYS C3059      18.773 -14.069   3.331  1.00 21.58           C
ATOM   2272  CE  LYS C3059      18.813 -15.392   4.070  1.00 19.13           C
ATOM   2273  NZ  LYS C3059      18.667 -16.545   3.158  1.00 24.92           N
ATOM   2274  C   LYS C3059      19.437  -9.121   3.744  1.00 21.37           C
ATOM   2275  O   LYS C3059      20.457  -8.734   3.165  1.00 22.73           O
ATOM   2276  N   GLU C3060      18.297  -8.440   3.745  1.00 22.26           N
ATOM   2277  CA  GLU C3060      18.175  -7.158   3.080  1.00 22.29           C
ATOM   2278  CB  GLU C3060      16.708  -6.716   3.076  1.00 24.97           C
ATOM   2279  CG  GLU C3060      16.424  -5.392   2.373  1.00 32.66           C
ATOM   2280  CD  GLU C3060      16.807  -5.410   0.901  1.00 37.10           C
ATOM   2281  OE1 GLU C3060      16.401  -6.359   0.190  1.00 38.38           O
ATOM   2282  OE2 GLU C3060      17.509  -4.472   0.456  1.00 38.70           O
ATOM   2283  C   GLU C3060      19.042  -6.172   3.864  1.00 20.94           C
ATOM   2284  O   GLU C3060      19.829  -5.429   3.285  1.00 22.93           O
ATOM   2285  N   ALA C3061      18.907  -6.178   5.186  1.00 19.68           N
ATOM   2286  CA  ALA C3061      19.698  -5.282   6.024  1.00 20.17           C
ATOM   2287  CB  ALA C3061      19.373  -5.515   7.499  1.00 19.49           C
ATOM   2288  C   ALA C3061      21.185  -5.520   5.759  1.00 19.14           C
ATOM   2289  O   ALA C3061      21.953  -4.576   5.572  1.00 18.81           O
ATOM   2290  N   PHE C3062      21.588  -6.786   5.723  1.00 19.90           N
ATOM   2291  CA  PHE C3062      22.987  -7.115   5.465  1.00 19.78           C
ATOM   2292  CB  PHE C3062      23.214  -8.624   5.570  1.00 20.80           C
ATOM   2293  CG  PHE C3062      24.604  -9.051   5.171  1.00 21.17           C
ATOM   2294  CD1 PHE C3062      24.896  -9.376   3.847  1.00 21.25           C
ATOM   2295  CD2 PHE C3062      25.629  -9.074   6.109  1.00 20.45           C
ATOM   2296  CE1 PHE C3062      26.195  -9.717   3.463  1.00 22.31           C
ATOM   2297  CE2 PHE C3062      26.930  -9.412   5.738  1.00 21.98           C
ATOM   2298  CZ  PHE C3062      27.211  -9.733   4.410  1.00 22.06           C
ATOM   2299  C   PHE C3062      23.443  -6.629   4.089  1.00 21.35           C
ATOM   2300  O   PHE C3062      24.526  -6.067   3.951  1.00 20.77           O
ATOM   2301  N   SER C3063      22.612  -6.843   3.074  1.00 22.17           N
ATOM   2302  CA  SER C3063     22.949  -6.434   1.717  1.00 22.74          C
ATOM   2303  CB  SER C3063     21.851  -6.873   0.754  1.00 23.43          C
ATOM   2304  OG  SER C3063     21.635  -8.265   0.877  1.00 28.48          O
ATOM   2305  C   SER C3063     23.123  -4.926   1.649  1.00 22.84          C
ATOM   2306  O   SER C3063     24.001  -4.422   0.947  1.00 21.58          O
ATOM   2307  N   LYS C3064     22.277  -4.205   2.377  1.00 21.35          N
ATOM   2308  CA  LYS C3064     22.370  -2.755   2.406  1.00 21.55          C
ATOM   2309  CB  LYS C3064     21.111  -2.168   3.055  1.00 22.13          C
ATOM   2310  CG  LYS C3064     19.841  -2.416   2.238  1.00 21.86          C
ATOM   2311  CD  LYS C3064     18.588  -1.884   2.929  1.00 22.40          C
ATOM   2312  CE  LYS C3064     18.653  -0.375   3.120  1.00 22.07          C
ATOM   2313  NZ  LYS C3064     17.579   0.125   4.017  1.00 21.49          N
ATOM   2314  C   LYS C3064     23.639  -2.341   3.168  1.00 21.95          C
ATOM   2315  O   LYS C3064     24.295  -1.363   2.812  1.00 22.05          O
ATOM   2316  N   ALA C3065     23.994  -3.104   4.197  1.00 20.93          N
ATOM   2317  CA  ALA C3065     25.193  -2.818   4.983  1.00 23.70          C
ATOM   2318  CB  ALA C3065     25.254  -3.729   6.200  1.00 22.08          C
ATOM   2319  C   ALA C3065     26.450  -3.010   4.136  1.00 25.75          C
ATOM   2320  O   ALA C3065     27.420  -2.278   4.297  1.00 25.29          O
ATOM   2321  N   MET C3066     26.433  -4.008   3.255  1.00 27.80          N
ATOM   2322  CA  MET C3066     27.569  -4.278   2.375  1.00 31.06          C
ATOM   2323  CB  MET C3066     27.386  -5.616   1.649  1.00 30.03          C
ATOM   2324  CG  MET C3066     27.666  -6.848   2.495  1.00 30.77          C
ATOM   2325  SD  MET C3066     29.395  -6.944   3.059  1.00 31.09          S
ATOM   2326  CE  MET C3066     30.192  -7.610   1.576  1.00 29.01          C
ATOM   2327  C   MET C3066     27.683  -3.159   1.342  1.00 33.44          C
ATOM   2328  O   MET C3066     28.778  -2.782   0.940  1.00 32.94          O
ATOM   2329  N   GLY C3067     26.539  -2.634   0.918  1.00 36.57          N
ATOM   2330  CA  GLY C3067     26.542  -1.565  -0.059  1.00 40.47          C
ATOM   2331  C   GLY C3067     26.101  -2.041  -1.426  1.00 43.36          C
ATOM   2332  O   GLY C3067     26.602  -1.573  -2.447  1.00 44.87          O
ATOM   2333  N   THR C3068     25.161  -2.976  -1.447  0.05 44.27          N
ATOM   2334  CA  THR C3068     24.650  -3.506  -2.701  0.05 45.40          C
ATOM   2335  CB  THR C3068     25.521  -4.680  -3.201  0.05 45.40          C
ATOM   2336  OG1 THR C3068     25.018  -5.147  -4.459  0.05 45.48          O
ATOM   2337  CG2 THR C3068     25.518  -5.821  -2.193  0.05 45.43          C
ATOM   2338  C   THR C3068     23.212  -3.973  -2.507  0.05 46.15          C
ATOM   2339  O   THR C3068     22.452  -3.355  -1.761  0.05 46.24          O
ATOM   2340  N   GLY C3069     22.839  -5.058  -3.175  0.05 47.05          N
ATOM   2341  CA  GLY C3069     21.488  -5.567  -3.043  0.05 48.19          C
ATOM   2342  C   GLY C3069     21.341  -6.984  -3.555  0.05 48.95          C
ATOM   2343  O   GLY C3069     22.322  -7.627  -3.927  0.05 49.00          O
ATOM   2344  N   ILE C3070     20.106  -7.471  -3.569  0.05 49.77          N
ATOM   2345  CA  ILE C3070     19.809  -8.817  -4.038  0.05 50.58          C
ATOM   2346  CB  ILE C3070     18.311  -9.155  -3.800  0.05 50.80          C
ATOM   2347  CG2 ILE C3070     17.434  -8.193  -4.584  0.05 51.01          C
ATOM   2348  CG1 ILE C3070     18.011 -10.600  -4.205  0.05 51.05          C
ATOM   2349  CD1 ILE C3070     18.852 -11.631  -3.486  0.05 51.19          C
ATOM   2350  C   ILE C3070     20.140  -8.927  -5.528  0.05 50.91          C
ATOM   2351  O   ILE C3070     20.642  -7.977  -6.126  0.05 50.98          O
ATOM   2352  N   SER C3071     19.868 -10.093  -6.108  0.05 51.31          N
ATOM   2353  CA  SER C3071     20.112 -10.372  -7.522  0.05 51.63          C
ATOM   2354  CB  SER C3071     19.393  -9.349  -8.411  0.05 51.73          C
ATOM   2355  OG  SER C3071     20.018  -8.080  -8.363  0.05 51.85          O
ATOM   2356  C   SER C3071     21.592 -10.420  -7.891  0.05 51.76          C
ATOM   2357  O   SER C3071     21.967 -11.053  -8.878  0.05 51.87          O
ATOM   2358  N   LYS C3072     22.433  -9.755  -7.106  0.05 51.86          N
ATOM   2359  CA  LYS C3072      23.867  -9.751  -7.374  0.05 51.85           C
ATOM   2360  CB  LYS C3072      24.396  -8.312  -7.449  0.05 52.23           C
ATOM   2361  CG  LYS C3072      24.392  -7.543  -6.131  0.05 52.70           C
ATOM   2362  CD  LYS C3072      25.580  -7.907  -5.245  0.05 53.07           C
ATOM   2363  CE  LYS C3072      26.905  -7.581  -5.920  0.05 53.33           C
ATOM   2364  NZ  LYS C3072      27.022  -6.134  -6.253  0.05 53.48           N
ATOM   2365  C   LYS C3072      24.606 -10.529  -6.292  0.05 51.55           C
ATOM   2366  O   LYS C3072      25.643 -11.140  -6.550  0.05 51.64           O
ATOM   2367  N   LEU C3073      24.062 -10.500  -5.080  0.05 51.11           N
ATOM   2368  CA  LEU C3073      24.660 -11.204  -3.953  0.05 50.57           C
ATOM   2369  CB  LEU C3073      24.615 -10.328  -2.699  0.05 50.79           C
ATOM   2370  CG  LEU C3073      25.349 -10.863  -1.467  0.05 50.92           C
ATOM   2371  CD1 LEU C3073      26.830 -11.010  -1.783  0.05 51.03           C
ATOM   2372  CD2 LEU C3073      25.145  -9.917  -0.294  0.05 50.94           C
ATOM   2373  C   LEU C3073      23.893 -12.498  -3.707  0.05 50.00           C
ATOM   2374  O   LEU C3073      24.444 -13.473  -3.198  0.05 50.02           O
ATOM   2375  N   GLY C3074      22.616 -12.492  -4.076  1.00 49.38           N
ATOM   2376  CA  GLY C3074      21.779 -13.663  -3.899  1.00 48.02           C
ATOM   2377  C   GLY C3074      21.479 -13.986  -2.447  1.00 46.92           C
ATOM   2378  O   GLY C3074      22.391 -14.150  -1.642  1.00 46.73           O
ATOM   2379  N   PHE C3075      20.197 -14.076  -2.107  1.00 46.04           N
ATOM   2380  CA  PHE C3075      19.804 -14.393  -0.741  1.00 45.56           C
ATOM   2381  CB  PHE C3075      18.305 -14.137  -0.544  1.00 45.22           C
ATOM   2382  CG  PHE C3075      17.969 -12.705  -0.211  1.00 44.58           C
ATOM   2383  CD1 PHE C3075      18.961 -11.724  -0.187  1.00 44.91           C
ATOM   2384  CD2 PHE C3075      16.661 -12.337   0.082  1.00 43.89           C
ATOM   2385  CE1 PHE C3075      18.654 -10.397   0.127  1.00 45.66           C
ATOM   2386  CE2 PHE C3075      16.340 -11.016   0.398  1.00 44.22           C
ATOM   2387  CZ  PHE C3075      17.338 -10.042   0.420  1.00 44.74           C
ATOM   2388  C   PHE C3075      20.147 -15.841  -0.407  1.00 45.42           C
ATOM   2389  O   PHE C3075      20.099 -16.251   0.754  1.00 44.99           O
ATOM   2390  N   GLN C3076      20.503 -16.607  -1.433  1.00 44.83           N
ATOM   2391  CA  GLN C3076      20.874 -18.006  -1.256  1.00 44.38           C
ATOM   2392  CB  GLN C3076      20.766 -18.749  -2.589  1.00 44.21           C
ATOM   2393  CG  GLN C3076      19.360 -19.192  -2.890  1.00 45.02           C
ATOM   2394  CD  GLN C3076      18.868 -20.206  -1.880  1.00 46.01           C
ATOM   2395  OE1 GLN C3076      17.666 -20.367  -1.676  1.00 47.94           O
ATOM   2396  NE2 GLN C3076      19.802 -20.906  -1.245  1.00 45.65           N
ATOM   2397  C   GLN C3076      22.287 -18.133  -0.706  1.00 43.75           C
ATOM   2398  O   GLN C3076      22.660 -19.165  -0.149  1.00 44.83           O
ATOM   2399  N   ASP C3077      23.070 -17.074  -0.862  1.00 43.01           N
ATOM   2400  CA  ASP C3077      24.442 -17.065  -0.377  1.00 41.11           C
ATOM   2401  CB  ASP C3077      25.315 -16.254  -1.333  1.00 44.24           C
ATOM   2402  CG  ASP C3077      25.261 -16.789  -2.756  1.00 45.88           C
ATOM   2403  OD1 ASP C3077      25.692 -17.943  -2.974  1.00 47.04           O
ATOM   2404  OD2 ASP C3077      24.777 -16.064  -3.652  1.00 46.86           O
ATOM   2405  C   ASP C3077      24.493 -16.481   1.028  1.00 38.51           C
ATOM   2406  O   ASP C3077      25.564 -16.291   1.598  1.00 39.35           O
ATOM   2407  N   LEU C3078      23.319 -16.194   1.578  1.00 35.03           N
ATOM   2408  CA  LEU C3078      23.199 -15.649   2.927  1.00 31.01           C
ATOM   2409  CB  LEU C3078      22.479 -14.296   2.889  1.00 30.66           C
ATOM   2410  CG  LEU C3078      23.280 -13.026   2.584  1.00 31.31           C
ATOM   2411  CD1 LEU C3078      24.253 -13.251   1.440  1.00 33.52           C
ATOM   2412  CD2 LEU C3078      22.303 -11.900   2.254  1.00 30.14           C
ATOM   2413  C   LEU C3078      22.396 -16.632   3.778  1.00 28.65           C
ATOM   2414  O   LEU C3078      21.391 -17.178   3.322  1.00 28.16           O
ATOM   2415  N   GLU C3079      22.839 -16.860   5.009  1.00 25.38           N
ATOM    2416  CA   GLU C3079       22.138 -17.779    5.895   1.00 24.35           C
ATOM    2417  CB   GLU C3079       22.794 -19.163    5.869   1.00 24.49           C
ATOM    2418  CG   GLU C3079       21.999 -20.224    6.616   1.00 24.73           C
ATOM    2419  CD   GLU C3079       22.653 -21.592    6.558   1.00 26.90           C
ATOM    2420  OE1  GLU C3079       23.770 -21.740    7.089   1.00 28.68           O
ATOM    2421  OE2  GLU C3079       22.053 -22.523    5.979   1.00 29.27           O
ATOM    2422  C    GLU C3079       22.098 -17.267    7.327   1.00 22.68           C
ATOM    2423  O    GLU C3079       23.123 -16.873    7.883   1.00 22.88           O
ATOM    2424  N    VAL C3080       20.901 -17.275    7.907   1.00 21.79           N
ATOM    2425  CA   VAL C3080       20.678 -16.824    9.276   1.00 21.18           C
ATOM    2426  CB   VAL C3080       19.705 -15.621    9.325   1.00 22.20           C
ATOM    2427  CG1  VAL C3080       19.404 -15.244   10.777   1.00 20.66           C
ATOM    2428  CG2  VAL C3080       20.311 -14.435    8.587   1.00 23.11           C
ATOM    2429  C    VAL C3080       20.064 -17.971   10.060   1.00 20.45           C
ATOM    2430  O    VAL C3080       18.972 -18.429    9.743   1.00 19.50           O
ATOM    2431  N    LEU C3081       20.781 -18.441   11.072   1.00 20.00           N
ATOM    2432  CA   LEU C3081       20.303 -19.540   11.897   1.00 21.15           C
ATOM    2433  CB   LEU C3081       21.328 -20.686   11.905   1.00 21.34           C
ATOM    2434  CG   LEU C3081       21.677 -21.275   10.528   1.00 22.27           C
ATOM    2435  CD1  LEU C3081       22.713 -22.396   10.653   1.00 23.04           C
ATOM    2436  CD2  LEU C3081       20.400 -21.802    9.884   1.00 24.47           C
ATOM    2437  C    LEU C3081       20.107 -19.003   13.300   1.00 21.01           C
ATOM    2438  O    LEU C3081       20.287 -17.811   13.541   1.00 20.54           O
ATOM    2439  N    ASN C3082       19.732 -19.881   14.220   1.00 21.50           N
ATOM    2440  CA   ASN C3082       19.530 -19.494   15.608   1.00 22.77           C
ATOM    2441  CB   ASN C3082       18.089 -19.783   16.020   1.00 23.53           C
ATOM    2442  CG   ASN C3082       17.099 -18.880   15.310   1.00 25.44           C
ATOM    2443  OD1  ASN C3082       16.907 -17.731   15.698   1.00 25.60           O
ATOM    2444  ND2  ASN C3082       16.488 -19.388   14.247   1.00 27.37           N
ATOM    2445  C    ASN C3082       20.499 -20.258   16.499   1.00 22.68           C
ATOM    2446  O    ASN C3082       20.629 -21.478   16.380   1.00 21.84           O
ATOM    2447  N    ASN C3083       21.191 -19.541   17.382   1.00 23.99           N
ATOM    2448  CA   ASN C3083       22.137 -20.187   18.282   1.00 23.34           C
ATOM    2449  CB   ASN C3083       23.141 -19.170   18.840   1.00 24.83           C
ATOM    2450  CG   ASN C3083       22.474 -18.019   19.575   1.00 25.31           C
ATOM    2451  OD1  ASN C3083       21.405 -18.175   20.174   1.00 23.71           O
ATOM    2452  ND2  ASN C3083       23.116 -16.859   19.550   1.00 26.83           N
ATOM    2453  C    ASN C3083       21.381 -20.877   19.415   1.00 25.05           C
ATOM    2454  O    ASN C3083       20.152 -20.876   19.432   1.00 22.22           O
ATOM    2455  N    GLU C3084       22.108 -21.460   20.365   1.00 27.04           N
ATOM    2456  CA   GLU C3084       21.472 -22.174   21.466   1.00 29.78           C
ATOM    2457  CB   GLU C3084       22.517 -22.954   22.275   1.00 32.58           C
ATOM    2458  CG   GLU C3084       23.715 -22.141   22.711   1.00 36.99           C
ATOM    2459  CD   GLU C3084       24.857 -22.184   21.707   1.00 41.57           C
ATOM    2460  OE1  GLU C3084       24.647 -21.812   20.529   1.00 42.03           O
ATOM    2461  OE2  GLU C3084       25.972 -22.590   22.107   1.00 43.80           O
ATOM    2462  C    GLU C3084       20.638 -21.294   22.396   1.00 30.13           C
ATOM    2463  O    GLU C3084       19.766 -21.796   23.111   1.00 30.37           O
ATOM    2464  N    ARG C3085       20.901 -19.991   22.401   1.00 28.98           N
ATOM    2465  CA   ARG C3085       20.119 -19.088   23.238   1.00 30.28           C
ATOM    2466  CB   ARG C3085       20.976 -17.912   23.716   1.00 31.17           C
ATOM    2467  CG   ARG C3085       22.055 -18.340   24.705   1.00 34.80           C
ATOM    2468  CD   ARG C3085       23.056 -17.237   24.995   1.00 37.35           C
ATOM    2469  NE   ARG C3085       24.367 -17.801   25.310   1.00 40.35           N
ATOM    2470  CZ   ARG C3085       24.634 -18.518   26.396   1.00 40.77           C
ATOM    2471  NH1  ARG C3085       23.681 -18.757   27.285   1.00 42.29           N
ATOM    2472  NH2  ARG C3085       25.852 -19.007   26.587   1.00 41.71           N
ATOM   2473  C    ARG C3085      18.918 -18.597  22.438  1.00 29.32           C
ATOM   2474  O    ARG C3085      18.112 -17.806  22.923  1.00 30.16           O
ATOM   2475  N    GLY C3086      18.805 -19.086  21.207  1.00 27.92           N
ATOM   2476  CA   GLY C3086      17.690 -18.714  20.350  1.00 26.11           C
ATOM   2477  C    GLY C3086      17.893 -17.452  19.530  1.00 25.66           C
ATOM   2478  O    GLY C3086      17.005 -17.044  18.782  1.00 26.33           O
ATOM   2479  N    ALA C3087      19.061 -16.831  19.654  1.00 23.88           N
ATOM   2480  CA   ALA C3087      19.328 -15.613  18.914  1.00 22.63           C
ATOM   2481  CB   ALA C3087      20.408 -14.797  19.610  1.00 21.67           C
ATOM   2482  C    ALA C3087      19.742 -15.893  17.478  1.00 22.49           C
ATOM   2483  O    ALA C3087      20.515 -16.808  17.210  1.00 22.63           O
ATOM   2484  N    PRO C3088      19.220 -15.098  16.532  1.00 21.73           N
ATOM   2485  CD   PRO C3088      18.185 -14.068  16.740  1.00 21.19           C
ATOM   2486  CA   PRO C3088      19.536 -15.244  15.112  1.00 20.08           C
ATOM   2487  CB   PRO C3088      18.434 -14.435  14.435  1.00 22.01           C
ATOM   2488  CG   PRO C3088      18.196 -13.325  15.412  1.00 23.33           C
ATOM   2489  C    PRO C3088      20.931 -14.689  14.822  1.00 20.77           C
ATOM   2490  O    PRO C3088      21.360 -13.704  15.434  1.00 19.53           O
ATOM   2491  N    TYR C3089      21.647 -15.327  13.903  1.00 18.65           N
ATOM   2492  CA   TYR C3089      22.986 -14.869  13.548  1.00 18.94           C
ATOM   2493  CB   TYR C3089      24.015 -15.410  14.557  1.00 19.72           C
ATOM   2494  CG   TYR C3089      24.295 -16.891  14.434  1.00 20.97           C
ATOM   2495  CD1  TYR C3089      25.313 -17.360  13.600  1.00 21.58           C
ATOM   2496  CE1  TYR C3089      25.549 -18.721  13.448  1.00 21.20           C
ATOM   2497  CD2  TYR C3089      23.521 -17.826  15.118  1.00 21.44           C
ATOM   2498  CE2  TYR C3089      23.748 -19.193  14.974  1.00 21.49           C
ATOM   2499  CZ   TYR C3089      24.764 -19.630  14.133  1.00 20.90           C
ATOM   2500  OH   TYR C3089      24.980 -20.972  13.961  1.00 21.13           O
ATOM   2501  C    TYR C3089      23.310 -15.356  12.142  1.00 19.33           C
ATOM   2502  O    TYR C3089      22.695 -16.305  11.658  1.00 18.04           O
ATOM   2503  N    PHE C3090      24.252 -14.694  11.476  1.00 21.68           N
ATOM   2504  CA   PHE C3090      24.644 -15.095  10.129  1.00 22.43           C
ATOM   2505  CB   PHE C3090      25.224 -13.921   9.343  1.00 21.81           C
ATOM   2506  CG   PHE C3090      24.187 -13.057   8.686  1.00 22.97           C
ATOM   2507  CD1  PHE C3090      23.627 -11.980   9.364  1.00 22.58           C
ATOM   2508  CD2  PHE C3090      23.774 -13.317   7.382  1.00 22.20           C
ATOM   2509  CE1  PHE C3090      22.670 -11.172   8.752  1.00 21.60           C
ATOM   2510  CE2  PHE C3090      22.815 -12.512   6.762  1.00 21.04           C
ATOM   2511  CZ   PHE C3090      22.267 -11.439   7.453  1.00 20.05           C
ATOM   2512  C    PHE C3090      25.681 -16.201  10.185  1.00 23.74           C
ATOM   2513  O    PHE C3090      26.804 -15.992  10.642  1.00 23.80           O
ATOM   2514  N    SER C3091      25.291 -17.381   9.727  1.00 25.13           N
ATOM   2515  CA   SER C3091      26.186 -18.522   9.707  1.00 24.76           C
ATOM   2516  CB   SER C3091      25.378 -19.805   9.790  1.00 25.31           C
ATOM   2517  OG   SER C3091      24.465 -19.856   8.709  1.00 25.46           O
ATOM   2518  C    SER C3091      26.959 -18.493   8.393  1.00 25.15           C
ATOM   2519  O    SER C3091      28.036 -19.075   8.285  1.00 24.95           O
ATOM   2520  N    GLN C3092      26.398 -17.806   7.401  1.00 25.28           N
ATOM   2521  CA   GLN C3092      27.012 -17.701   6.079  1.00 26.50           C
ATOM   2522  CB   GLN C3092      26.414 -18.759   5.150  1.00 29.33           C
ATOM   2523  CG   GLN C3092      26.948 -18.723   3.728  1.00 33.15           C
ATOM   2524  CD   GLN C3092      28.353 -19.271   3.638  1.00 35.44           C
ATOM   2525  OE1  GLN C3092      29.292 -18.711   4.204  1.00 36.58           O
ATOM   2526  NE2  GLN C3092      28.503 -20.384   2.935  1.00 37.04           N
ATOM   2527  C    GLN C3092      26.780 -16.323   5.465  1.00 25.49           C
ATOM   2528  O    GLN C3092      25.637 -15.871   5.365  1.00 24.76           O
ATOM   2529  N    ALA C3093      27.864 -15.674   5.042  1.00 24.56           N
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ATOM   2530  CA  ALA C3093      27.801 -14.350   4.422  1.00 24.82           C
ATOM   2531  CB  ALA C3093      27.400 -13.302   5.451  1.00 24.36           C
ATOM   2532  C   ALA C3093      29.152 -13.978   3.808  1.00 24.47           C
ATOM   2533  O   ALA C3093      30.200 -14.284   4.365  1.00 24.58           O
ATOM   2534  N   PRO C3094      29.137 -13.289   2.654  1.00 25.93           N
ATOM   2535  CD  PRO C3094      27.920 -12.815   1.965  1.00 24.23           C
ATOM   2536  CA  PRO C3094      30.345 -12.860   1.935  1.00 25.56           C
ATOM   2537  CB  PRO C3094      29.788 -12.404   0.592  1.00 26.20           C
ATOM   2538  CG  PRO C3094      28.472 -11.792   0.997  1.00 26.19           C
ATOM   2539  C   PRO C3094      31.098 -11.744   2.658  1.00 26.12           C
ATOM   2540  O   PRO C3094      31.403 -10.703   2.077  1.00 25.63           O
ATOM   2541  N   PHE C3095      31.404 -11.971   3.930  1.00 26.90           N
ATOM   2542  CA  PHE C3095      32.098 -10.977   4.739  1.00 26.88           C
ATOM   2543  CB  PHE C3095      31.068 -10.004   5.331  1.00 26.61           C
ATOM   2544  CG  PHE C3095      31.665  -8.923   6.179  1.00 26.50           C
ATOM   2545  CD1 PHE C3095      31.491  -8.931   7.559  1.00 25.34           C
ATOM   2546  CD2 PHE C3095      32.406  -7.895   5.601  1.00 26.22           C
ATOM   2547  CE1 PHE C3095      32.043  -7.937   8.350  1.00 24.07           C
ATOM   2548  CE2 PHE C3095      32.964  -6.895   6.384  1.00 25.18           C
ATOM   2549  CZ  PHE C3095      32.781  -6.917   7.764  1.00 26.71           C
ATOM   2550  C   PHE C3095      32.830 -11.726   5.841  1.00 27.07           C
ATOM   2551  O   PHE C3095      32.234 -12.547   6.527  1.00 28.82           O
ATOM   2552  N   SER C3096      34.119 -11.450   6.013  1.00 27.08           N
ATOM   2553  CA  SER C3096      34.907 -12.153   7.022  1.00 26.87           C
ATOM   2554  CB  SER C3096      36.287 -12.488   6.457  1.00 27.85           C
ATOM   2555  OG  SER C3096      36.967 -11.315   6.073  1.00 29.01           O
ATOM   2556  C   SER C3096      35.072 -11.446   8.364  1.00 27.60           C
ATOM   2557  O   SER C3096      35.753 -11.957   9.251  1.00 28.27           O
ATOM   2558  N   GLY C3097      34.466 -10.271   8.513  1.00 26.02           N
ATOM   2559  CA  GLY C3097      34.559  -9.558   9.775  1.00 25.74           C
ATOM   2560  C   GLY C3097      33.406  -9.991  10.664  1.00 26.75           C
ATOM   2561  O   GLY C3097      32.796 -11.029  10.422  1.00 26.07           O
ATOM   2562  N   LYS C3098      33.084  -9.202  11.682  1.00 25.99           N
ATOM   2563  CA  LYS C3098      31.985  -9.559  12.572  1.00 26.80           C
ATOM   2564  CB  LYS C3098      32.302  -9.106  13.998  1.00 28.83           C
ATOM   2565  CG  LYS C3098      33.742  -9.410  14.383  1.00 33.82           C
ATOM   2566  CD  LYS C3098      34.014  -9.227  15.860  1.00 37.34           C
ATOM   2567  CE  LYS C3098      33.574 -10.444  16.652  1.00 39.78           C
ATOM   2568  NZ  LYS C3098      33.986 -10.326  18.084  1.00 40.81           N
ATOM   2569  C   LYS C3098      30.676  -8.944  12.095  1.00 25.06           C
ATOM   2570  O   LYS C3098      30.633  -7.785  11.670  1.00 24.85           O
ATOM   2571  N   ILE C3099      29.611  -9.737  12.152  1.00 22.88           N
ATOM   2572  CA  ILE C3099      28.292  -9.286  11.730  1.00 20.01           C
ATOM   2573  CB  ILE C3099      27.688 -10.246  10.687  1.00 19.89           C
ATOM   2574  CG2 ILE C3099      26.373  -9.674  10.150  1.00 15.87           C
ATOM   2575  CG1 ILE C3099      28.686 -10.474   9.548  1.00 18.98           C
ATOM   2576  CD1 ILE C3099      28.241 -11.543   8.561  1.00 19.71           C
ATOM   2577  C   ILE C3099      27.364  -9.243  12.941  1.00 20.05           C
ATOM   2578  O   ILE C3099      26.967 -10.289  13.459  1.00 21.97           O
ATOM   2579  N   TRP C3100      27.032  -8.038  13.398  1.00 18.21           N
ATOM   2580  CA  TRP C3100      26.140  -7.880  14.541  1.00 17.20           C
ATOM   2581  CB  TRP C3100      26.570  -6.678  15.383  1.00 17.48           C
ATOM   2582  CG  TRP C3100      27.959  -6.851  15.948  1.00 17.00           C
ATOM   2583  CD2 TRP C3100      28.323  -7.642  17.085  1.00 16.80           C
ATOM   2584  CE2 TRP C3100      29.724  -7.538  17.237  1.00 18.05           C
ATOM   2585  CE3 TRP C3100      27.599  -8.431  17.992  1.00 19.31           C
ATOM   2586  CD1 TRP C3100      29.119  -6.316  15.465  1.00 17.86           C
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ATOM   2587  NE1 TRP C3100      30.188  -6.724  16.236  1.00 18.87          N
ATOM   2588  CZ2 TRP C3100      30.417  -8.192  18.263  1.00 19.19          C
ATOM   2589  CZ3 TRP C3100      28.290  -9.082  19.012  1.00 19.20          C
ATOM   2590  CH2 TRP C3100      29.687  -8.955  19.136  1.00 17.94          C
ATOM   2591  C   TRP C3100      24.717  -7.699  14.018  1.00 17.56          C
ATOM   2592  O   TRP C3100      24.365  -6.656  13.461  1.00 18.14          O
ATOM   2593  N   LEU C3101      23.916  -8.742  14.191  1.00 17.00          N
ATOM   2594  CA  LEU C3101      22.540  -8.764  13.725  1.00 16.11          C
ATOM   2595  CB  LEU C3101      22.321  -9.991  12.837  1.00 16.56          C
ATOM   2596  CG  LEU C3101      20.875 -10.417  12.559  1.00 16.77          C
ATOM   2597  CD1 LEU C3101      20.194  -9.413  11.625  1.00 15.60          C
ATOM   2598  CD2 LEU C3101      20.883 -11.809  11.939  1.00 18.41          C
ATOM   2599  C   LEU C3101      21.525  -8.811  14.852  1.00 16.81          C
ATOM   2600  O   LEU C3101      21.746  -9.435  15.890  1.00 14.02          O
ATOM   2601  N   SER C3102      20.410  -8.128  14.638  1.00 15.53          N
ATOM   2602  CA  SER C3102      19.316  -8.151  15.588  1.00 14.91          C
ATOM   2603  CB  SER C3102      19.424  -7.035  16.619  1.00 14.40          C
ATOM   2604  OG  SER C3102      18.483  -7.263  17.657  1.00 15.41          O
ATOM   2605  C   SER C3102      18.052  -7.981  14.761  1.00 14.92          C
ATOM   2606  O   SER C3102      18.020  -7.195  13.805  1.00 14.51          O
ATOM   2607  N   ILE C3103      17.023  -8.734  15.129  1.00 14.41          N
ATOM   2608  CA  ILE C3103      15.744  -8.710  14.437  1.00 15.86          C
ATOM   2609  CB  ILE C3103      15.490 -10.043  13.668  1.00 16.91          C
ATOM   2610  CG2 ILE C3103      14.171  -9.958  12.880  1.00 18.33          C
ATOM   2611  CG1 ILE C3103      16.665 -10.353  12.737  1.00 18.54          C
ATOM   2612  CD1 ILE C3103      16.557 -11.729  12.042  1.00 20.00          C
ATOM   2613  C   ILE C3103      14.657  -8.608  15.495  1.00 17.43          C
ATOM   2614  O   ILE C3103      14.805  -9.148  16.594  1.00 17.45          O
ATOM   2615  N   SER C3104      13.566  -7.929  15.157  1.00 18.17          N
ATOM   2616  CA  SER C3104      12.439  -7.798  16.070  1.00 20.57          C
ATOM   2617  CB  SER C3104      12.610  -6.583  16.986  1.00 19.79          C
ATOM   2618  OG  SER C3104      11.596  -6.571  17.981  1.00 23.17          O
ATOM   2619  C   SER C3104      11.188  -7.645  15.214  1.00 22.21          C
ATOM   2620  O   SER C3104      11.269  -7.301  14.033  1.00 22.47          O
ATOM   2621  N   HIS C3105      10.028  -7.889  15.796  1.00 23.30          N
ATOM   2622  CA  HIS C3105       8.818  -7.784  15.009  1.00 25.44          C
ATOM   2623  CB  HIS C3105       8.597  -9.083  14.241  1.00 27.72          C
ATOM   2624  CG  HIS C3105       8.509 -10.287  15.125  1.00 29.50          C
ATOM   2625  CD2 HIS C3105       7.438 -10.938  15.639  1.00 33.02          C
ATOM   2626  ND1 HIS C3105       9.622 -10.934  15.615  1.00 32.99          N
ATOM   2627  CE1 HIS C3105       9.242 -11.933  16.393  1.00 34.27          C
ATOM   2628  NE2 HIS C3105       7.922 -11.956  16.424  1.00 33.98          N
ATOM   2629  C   HIS C3105       7.565  -7.489  15.805  1.00 26.04          C
ATOM   2630  O   HIS C3105       7.499  -7.729  17.009  1.00 23.14          O
ATOM   2631  N   THR C3106       6.575  -6.972  15.086  1.00 28.54          N
ATOM   2632  CA  THR C3106       5.261  -6.652  15.613  1.00 30.04          C
ATOM   2633  CB  THR C3106       4.855  -5.209  15.300  1.00 31.60          C
ATOM   2634  OG1 THR C3106       4.804  -5.030  13.878  1.00 31.75          O
ATOM   2635  CG2 THR C3106       5.848  -4.231  15.905  1.00 30.63          C
ATOM   2636  C   THR C3106       4.332  -7.576  14.840  1.00 30.05          C
ATOM   2637  O   THR C3106       4.792  -8.451  14.101  1.00 31.00          O
ATOM   2638  N   ASP C3107       3.031  -7.374  14.987  1.00 31.29          N
ATOM   2639  CA  ASP C3107       2.056  -8.206  14.296  1.00 32.30          C
ATOM   2640  CB  ASP C3107       0.674  -8.033  14.934  1.00 36.82          C
ATOM   2641  CG  ASP C3107       0.596  -8.612  16.327  1.00 40.78          C
ATOM   2642  OD1 ASP C3107      -0.205  -8.097  17.136  1.00 44.76          O
ATOM   2643  OD2 ASP C3107       1.319  -9.591  16.612  1.00 44.36          O
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ATOM   2644  C    ASP C3107      1.959  -7.890  12.807  1.00 31.24           C
ATOM   2645  O    ASP C3107      1.521  -8.729  12.026  1.00 32.84           O
ATOM   2646  N    GLN C3108      2.374  -6.690  12.410  1.00 28.20           N
ATOM   2647  CA   GLN C3108      2.284  -6.289  11.009  1.00 27.03           C
ATOM   2648  CB   GLN C3108      1.590  -4.928  10.877  0.05 26.57           C
ATOM   2649  CG   GLN C3108      0.284  -4.788  11.626  0.05 26.25           C
ATOM   2650  CD   GLN C3108      0.486  -4.733  13.121  0.05 26.05           C
ATOM   2651  OE1  GLN C3108      1.220  -3.887  13.631  0.05 25.96           O
ATOM   2652  NE2  GLN C3108     -0.165  -5.636  13.834  0.05 25.84           N
ATOM   2653  C    GLN C3108      3.607  -6.204  10.264  1.00 25.37           C
ATOM   2654  O    GLN C3108      3.624  -6.210   9.032  1.00 24.85           O
ATOM   2655  N    PHE C3109      4.716  -6.098  10.987  1.00 24.20           N
ATOM   2656  CA   PHE C3109      5.996  -5.994  10.299  1.00 23.19           C
ATOM   2657  CB   PHE C3109      6.210  -4.548   9.827  1.00 24.65           C
ATOM   2658  CG   PHE C3109      6.268  -3.541  10.947  1.00 26.19           C
ATOM   2659  CD1  PHE C3109      7.406  -3.421  11.738  1.00 26.36           C
ATOM   2660  CD2  PHE C3109      5.181  -2.714  11.211  1.00 27.63           C
ATOM   2661  CE1  PHE C3109      7.464  -2.490  12.780  1.00 26.39           C
ATOM   2662  CE2  PHE C3109      5.225  -1.780  12.249  1.00 28.63           C
ATOM   2663  CZ   PHE C3109      6.371  -1.669  13.036  1.00 28.60           C
ATOM   2664  C    PHE C3109      7.191  -6.459  11.116  1.00 21.14           C
ATOM   2665  O    PHE C3109      7.100  -6.648  12.328  1.00 19.22           O
ATOM   2666  N    VAL C3110      8.308  -6.650  10.425  1.00 19.26           N
ATOM   2667  CA   VAL C3110      9.550  -7.083  11.052  1.00 19.85           C
ATOM   2668  CB   VAL C3110     10.027  -8.438  10.471  1.00 21.25           C
ATOM   2669  CG1  VAL C3110     11.360  -8.859  11.101  1.00 23.25           C
ATOM   2670  CG2  VAL C3110      8.980  -9.488  10.719  1.00 25.17           C
ATOM   2671  C    VAL C3110     10.604  -6.039  10.737  1.00 19.21           C
ATOM   2672  O    VAL C3110     10.503  -5.345   9.725  1.00 19.53           O
ATOM   2673  N    THR C3111     11.603  -5.925  11.608  1.00 19.09           N
ATOM   2674  CA   THR C3111     12.695  -4.984  11.409  1.00 20.72           C
ATOM   2675  CB   THR C3111     12.608  -3.765  12.368  1.00 22.75           C
ATOM   2676  OG1  THR C3111     12.635  -4.216  13.730  1.00 26.03           O
ATOM   2677  CG2  THR C3111     11.322  -2.976  12.124  1.00 22.96           C
ATOM   2678  C    THR C3111     13.993  -5.725  11.684  1.00 20.16           C
ATOM   2679  O    THR C3111     14.024  -6.664  12.481  1.00 20.27           O
ATOM   2680  N    ALA C3112     15.060  -5.312  11.010  1.00 19.72           N
ATOM   2681  CA   ALA C3112     16.361  -5.935  11.201  1.00 19.77           C
ATOM   2682  CB   ALA C3112     16.617  -6.975  10.109  1.00 18.61           C
ATOM   2683  C    ALA C3112     17.441  -4.868  11.172  1.00 19.41           C
ATOM   2684  O    ALA C3112     17.337  -3.885  10.442  1.00 22.32           O
ATOM   2685  N    SER C3113     18.474  -5.062  11.980  1.00 20.21           N
ATOM   2686  CA   SER C3113     19.579  -4.124  12.045  1.00 18.53           C
ATOM   2687  CB   SER C3113     19.506  -3.298  13.327  1.00 19.50           C
ATOM   2688  OG   SER C3113     20.510  -2.293  13.328  1.00 19.90           O
ATOM   2689  C    SER C3113     20.888  -4.895  12.003  1.00 18.71           C
ATOM   2690  O    SER C3113     21.084  -5.843  12.767  1.00 16.55           O
ATOM   2691  N    VAL C3114     21.779  -4.472  11.107  1.00 17.09           N
ATOM   2692  CA   VAL C3114     23.071  -5.115  10.930  1.00 17.37           C
ATOM   2693  CB   VAL C3114     23.145  -5.842   9.563  1.00 16.61           C
ATOM   2694  CG1  VAL C3114     24.593  -6.263   9.255  1.00 18.34           C
ATOM   2695  CG2  VAL C3114     22.244  -7.050   9.576  1.00 16.94           C
ATOM   2696  C    VAL C3114     24.216  -4.116  10.993  1.00 16.94           C
ATOM   2697  O    VAL C3114     24.145  -3.043  10.408  1.00 16.28           O
ATOM   2698  N    ILE C3115     25.265  -4.477  11.720  1.00 17.86           N
ATOM   2699  CA   ILE C3115     26.446  -3.632  11.820  1.00 19.21           C
ATOM   2700  CB   ILE C3115     26.667  -3.085  13.253  1.00 19.71           C
ATOM    2701  CG2 ILE C3115      27.926  -2.217  13.287  1.00 19.20           C
ATOM    2702  CG1 ILE C3115      25.451  -2.268  13.703  1.00 19.12           C
ATOM    2703  CD1 ILE C3115      25.573  -1.701  15.110  1.00 20.38           C
ATOM    2704  C   ILE C3115      27.627  -4.516  11.440  1.00 18.95           C
ATOM    2705  O   ILE C3115      27.806  -5.589  12.007  1.00 18.31           O
ATOM    2706  N   LEU C3116      28.409  -4.076  10.457  1.00 19.22           N
ATOM    2707  CA  LEU C3116      29.578  -4.830  10.021  1.00 20.77           C
ATOM    2708  CB  LEU C3116      29.696  -4.805   8.493  1.00 20.70           C
ATOM    2709  CG  LEU C3116      28.445  -5.235   7.703  1.00 19.25           C
ATOM    2710  CD1 LEU C3116      28.758  -5.249   6.218  1.00 21.02           C
ATOM    2711  CD2 LEU C3116      27.996  -6.614   8.150  1.00 19.48           C
ATOM    2712  C   LEU C3116      30.803  -4.182  10.655  1.00 21.44           C
ATOM    2713  O   LEU C3116      30.996  -2.969  10.554  1.00 21.12           O
ATOM    2714  N   GLU C3117      31.620  -4.994  11.314  1.00 23.48           N
ATOM    2715  CA  GLU C3117      32.812  -4.493  11.987  1.00 26.83           C
ATOM    2716  CB  GLU C3117      32.571  -4.457  13.504  1.00 27.48           C
ATOM    2717  CG  GLU C3117      33.817  -4.166  14.343  1.00 30.16           C
ATOM    2718  CD  GLU C3117      33.628  -4.470  15.826  1.00 29.66           C
ATOM    2719  OE1 GLU C3117      33.182  -5.595  16.158  1.00 29.18           O
ATOM    2720  OE2 GLU C3117      33.932  -3.585  16.660  1.00 29.22           O
ATOM    2721  C   GLU C3117      34.048  -5.335  11.680  1.00 28.97           C
ATOM    2722  O   GLU C3117      33.978  -6.563  11.578  1.00 27.81           O
ATOM    2723  N   GLU C3118      35.178  -4.657  11.513  1.00 31.18           N
ATOM    2724  CA  GLU C3118      36.446  -5.323  11.248  1.00 35.42           C
ATOM    2725  CB  GLU C3118      37.015  -4.880   9.893  1.00 37.41           C
ATOM    2726  CG  GLU C3118      36.592  -5.772   8.727  1.00 41.62           C
ATOM    2727  CD  GLU C3118      37.041  -5.248   7.368  1.00 43.91           C
ATOM    2728  OE1 GLU C3118      38.193  -4.776   7.253  1.00 46.07           O
ATOM    2729  OE2 GLU C3118      36.242  -5.321   6.409  1.00 44.10           O
ATOM    2730  C   GLU C3118      37.414  -4.963  12.369  1.00 35.74           C
ATOM    2731  O   GLU C3118      37.417  -3.784  12.785  1.00 35.88           O
ATOM    2732  OXT GLU C3118      38.154  -5.858  12.821  1.00 38.35           O
TER     2733      GLU C3118
ATOM    2734  O   HOH W4002      24.915  17.154  36.149  1.00 24.34           O
ATOM    2735  O   HOH W4003       1.430   5.412   7.521  1.00 22.65           O
ATOM    2736  O   HOH W4004      15.230 -11.883  17.512  1.00 29.62           O
ATOM    2737  O   HOH W4006      20.551   4.946  39.709  1.00 33.21           O
ATOM    2738  O   HOH W4008       0.497  12.883  37.515  1.00 46.32           O
ATOM    2739  O   HOH W4009      22.219   1.070   4.722  1.00 20.90           O
ATOM    2740  O   HOH W4010      23.057   4.216  27.783  1.00 22.10           O
ATOM    2741  O   HOH W4012      26.158   9.664   6.047  1.00 26.69           O
ATOM    2742  O   HOH W4013      13.195 -14.652  11.137  1.00 18.24           O
ATOM    2743  O   HOH W4014      32.126 -19.177   9.562  1.00 41.78           O
ATOM    2744  O   HOH W4016      11.365   8.055  -2.295  1.00 29.34           O
ATOM    2745  O   HOH W4017      16.979   7.951  22.041  1.00 23.20           O
ATOM    2746  O   HOH W4018      20.734  17.150  36.413  1.00 25.86           O
ATOM    2747  O   HOH W4020      -9.281  -6.387  41.928  1.00 31.95           O
ATOM    2748  O   HOH W4021      18.869 -12.662  22.632  1.00 30.51           O
ATOM    2749  O   HOH W4025      18.802  13.286  -2.320  1.00 31.86           O
ATOM    2750  O   HOH W4026      26.500  16.583  31.811  1.00 52.21           O
ATOM    2751  O   HOH W4027       6.858  -4.124   3.265  1.00 23.26           O
ATOM    2752  O   HOH W4028      10.702   1.088  -3.405  1.00 41.81           O
ATOM    2753  O   HOH W4029      12.811   8.598  27.541  1.00 33.12           O
ATOM    2754  O   HOH W4031      12.749  -8.445  19.973  1.00 24.85           O
ATOM    2755  O   HOH W4032      13.535   0.610   2.032  1.00 40.39           O
ATOM    2756  O   HOH W4033      13.594   8.162  33.675  1.00 30.23           O
ATOM    2757  O   HOH W4035      10.527   5.028  27.661  1.00 22.20           O
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ATOM   2758  O   HOH W4038      10.071   6.775  24.507  1.00 34.64           O
ATOM   2759  O   HOH W4039      22.581   2.348   2.717  1.00 30.28           O
ATOM   2760  O   HOH W4041      34.765 -18.840   6.665  1.00 52.31           O
ATOM   2761  O   HOH W4042      19.832  10.430  22.362  1.00 30.27           O
ATOM   2762  O   HOH W4043      25.556  -0.749  36.545  1.00 47.38           O
ATOM   2763  O   HOH W4044       1.280  -1.711  37.119  1.00 35.25           O
ATOM   2764  O   HOH W4045      23.055  -3.951  37.102  1.00 29.32           O
ATOM   2765  O   HOH W4046      10.346   9.220  18.446  1.00 31.53           O
ATOM   2766  O   HOH W4047      -3.287   0.403  31.271  1.00 53.94           O
ATOM   2767  O   HOH W4048       4.921  -2.235   2.298  1.00 35.71           O
ATOM   2768  O   HOH W4050       4.512  -5.663  22.584  1.00 34.27           O
ATOM   2769  O   HOH W4051      32.165 -16.448   3.541  1.00 29.46           O
ATOM   2770  O   HOH W4052      17.356 -10.554  17.298  1.00 20.37           O
ATOM   2771  O   HOH W4053      23.079   8.307  36.567  1.00 27.23           O
ATOM   2772  O   HOH W4054      22.333   9.961  24.703  1.00 41.93           O
ATOM   2773  O   HOH W4055      19.848   3.106   3.638  1.00 23.68           O
ATOM   2774  O   HOH W4056      14.228   9.547   2.164  1.00 13.78           O
ATOM   2775  O   HOH W4057      -5.992   9.409  37.088  1.00 40.47           O
ATOM   2776  O   HOH W4058      15.141   2.885   1.432  1.00 32.54           O
ATOM   2777  O   HOH W4059      27.207   3.715  -0.205  1.00 38.02           O
ATOM   2778  O   HOH W4060       4.520   8.617  13.683  1.00 29.66           O
ATOM   2779  O   HOH W4061      -0.534  22.844   0.843  1.00 43.95           O
ATOM   2780  O   HOH W4062      33.271   0.399   4.561  1.00 41.51           O
ATOM   2781  O   HOH W4063      10.750  -9.990  18.523  1.00 37.79           O
ATOM   2782  O   HOH W4065      35.003   2.841  10.072  1.00 34.95           O
ATOM   2783  O   HOH W4066      15.619  13.987  20.059  1.00 51.87           O
ATOM   2784  O   HOH W4067      30.322 -16.861   5.985  1.00 25.67           O
ATOM   2785  O   HOH W4068      -3.928  16.855   6.776  1.00 37.28           O
ATOM   2786  O   HOH W4069      20.489   9.067  39.451  1.00 48.83           O
ATOM   2787  O   HOH W4070      38.865  -2.991  24.079  1.00 52.94           O
ATOM   2788  O   HOH W4071      18.289  12.534  22.275  1.00 32.83           O
ATOM   2789  O   HOH W4072      16.738   0.024  14.519  1.00 34.01           O
ATOM   2790  O   HOH W4073       1.959 -19.500  14.371  1.00 40.61           O
ATOM   2791  O   HOH W4074       1.805 -19.989   7.096  1.00 40.73           O
ATOM   2792  O   HOH W4075      15.612  10.434  34.742  1.00 32.10           O
ATOM   2793  O   HOH W4076      13.088   0.232  13.391  1.00 37.71           O
ATOM   2794  O   HOH W4077      -3.125  13.706   3.280  1.00 34.62           O
ATOM   2795  O   HOH W4078       2.257   8.002  15.256  1.00 30.49           O
ATOM   2796  O   HOH W4079       1.805   3.820  14.707  1.00 34.86           O
ATOM   2797  O   HOH W4080       5.391  -8.908  -2.363  1.00 35.80           O
ATOM   2798  O   HOH W4081      13.173  18.130  19.444  1.00 42.58           O
ATOM   2799  O   HOH W4083       3.428  25.760   7.166  1.00 47.46           O
ATOM   2800  O   HOH W4085      19.600   0.144  14.509  1.00 27.27           O
ATOM   2801  O   HOH W4086      17.905 -21.379  25.352  1.00 38.73           O
ATOM   2802  O   HOH W4087      33.360   5.719  22.662  1.00 36.03           O
ATOM   2803  O   HOH W4089       9.617  -0.859  41.147  1.00 32.45           O
ATOM   2804  O   HOH W4090      28.109 -16.115   0.982  1.00 29.92           O
ATOM   2805  O   HOH W4091      38.387 -10.896   9.764  1.00 47.94           O
ATOM   2806  O   HOH W4092       5.988  24.794   8.424  1.00 43.14           O
ATOM   2807  O   HOH W4093      -3.277   6.265   6.376  1.00 35.40           O
ATOM   2808  O   HOH W4094      30.455  10.041   6.941  1.00 32.99           O
ATOM   2809  O   HOH W4095      26.815   0.664   4.954  1.00 27.85           O
ATOM   2810  O   HOH W4096      15.273  23.735  -4.277  1.00 47.73           O
ATOM   2811  O   HOH W4099      26.449   1.509   2.656  1.00 65.15           O
ATOM   2812  O   HOH W4100       0.838   7.963   3.230  1.00 37.27           O
ATOM   2813  O   HOH W4101      29.381   8.723   0.899  1.00 43.02           O
ATOM   2814  O   HOH W4102      40.660  -5.785  23.570  1.00 45.63           O
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ATOM   2815  O   HOH W4103      26.328   6.312   5.240  1.00 53.46           O
ATOM   2816  O   HOH W4104      34.720   1.902  16.155  1.00 43.82           O
ATOM   2817  O   HOH W4105      -7.319  -8.388  40.539  1.00 39.00           O
ATOM   2818  O   HOH W4106      18.869  25.116   1.680  1.00 46.38           O
ATOM   2819  O   HOH W4107      16.340  14.706  24.191  1.00 38.04           O
ATOM   2820  O   HOH W4108       6.923   8.908  27.885  1.00 36.28           O
ATOM   2821  O   HOH W4109      12.525 -11.624  17.355  1.00 34.51           O
ATOM   2822  O   HOH W4110      34.314  -7.049  18.369  1.00 34.61           O
ATOM   2823  O   HOH W4113      38.750  -2.512  27.167  1.00 57.88           O
ATOM   2824  O   HOH W4114      18.115   3.750   1.319  1.00 31.45           O
ATOM   2825  O   HOH W4115      27.875   1.248  31.553  1.00 55.12           O
ATOM   2826  O   HOH W4116       7.683 -21.130  -8.639  1.00 46.38           O
ATOM   2827  O   HOH W4117      -0.188   6.861  39.329  1.00 45.23           O
ATOM   2828  O   HOH W4118      15.597   2.256  13.150  1.00 38.63           O
ATOM   2829  O   HOH W4120      29.648  18.094  28.167  1.00 35.93           O
ATOM   2830  O   HOH W4121      16.930 -20.733  11.766  1.00 37.44           O
ATOM   2831  O   HOH W4122       7.167 -12.636  -7.617  1.00 48.07           O
ATOM   2832  O   HOH W4123      37.628  10.036  12.640  1.00 43.48           O
ATOM   2833  O   HOH W4124      13.082 -13.269  27.306  1.00 52.38           O
ATOM   2834  O   HOH W4125       4.976 -26.696   6.493  1.00 47.37           O
ATOM   2835  O   HOH W4126      -2.241 -22.225  15.163  1.00 51.68           O
ATOM   2836  O   HOH W4127       8.988 -10.057  20.455  1.00 50.47           O
ATOM   2837  O   HOH W4128      18.719 -13.639  -6.616  1.00 49.20           O
ATOM   2838  O   HOH W4129      21.651  22.882   0.638  1.00 46.89           O
ATOM   2839  O   HOH W4130      27.239   3.345  29.234  1.00 25.74           O
ATOM   2840  O   HOH W4131       9.016  -8.748  -1.209  1.00 45.62           O
ATOM   2841  O   HOH W4132      13.082  -9.632  37.155  1.00 43.55           O
ATOM   2842  O   HOH W4133      29.378  15.689   6.467  1.00 49.72           O
ATOM   2843  O   HOH W4134      -7.908  -3.988  42.818  1.00 30.81           O
ATOM   2844  O   HOH W4135       3.562  -8.297  27.665  1.00 45.56           O
ATOM   2845  O   HOH W4136      -7.199  -0.161  28.514  1.00 24.59           O
ATOM   2846  O   HOH W4137      31.194   6.207   6.288  1.00 42.31           O
ATOM   2847  O   HOH W4138      19.383   8.002  23.933  1.00 35.57           O
ATOM   2848  O   HOH W4139      -6.335  -8.439  24.417  1.00 47.50           O
ATOM   2849  O   HOH W4140      37.800  -1.901  17.636  1.00 38.42           O
ATOM   2850  O   HOH W4141      36.896   4.279  13.213  1.00 44.41           O
ATOM   2851  O   HOH W4142      18.980  16.923  -5.091  1.00 32.40           O
ATOM   2852  O   HOH W4143       6.338  17.886  -7.468  1.00 44.66           O
ATOM   2853  O   HOH W4144       8.099   9.789  -8.452  1.00 34.29           O
ATOM   2854  O   HOH W4145      22.400  22.185   4.929  1.00 58.51           O
ATOM   2855  O   HOH W4146      23.417   1.724  -2.662  1.00 49.61           O
ATOM   2856  O   HOH W4147      28.353  11.186   5.638  1.00 36.80           O
ATOM   2857  O   HOH W4148       0.018   1.428   9.817  1.00 46.52           O
ATOM   2858  O   HOH W4149      38.727  -0.038  26.083  1.00 50.08           O
ATOM   2859  O   HOH W4150      24.171  -8.880  20.179  1.00 43.36           O
ATOM   2860  O   HOH W4151      -0.768  -7.980  41.105  1.00 48.48           O
ATOM   2861  O   HOH W4152      26.257  -5.046  35.426  1.00 48.00           O
ATOM   2862  O   HOH W4153      35.432   0.075  28.104  1.00 43.89           O
ATOM   2863  O   HOH W4154      35.301   2.870  27.050  1.00 52.24           O
ATOM   2864  O   HOH W4155      -4.097   3.796  17.913  1.00 44.40           O
ATOM   2865  O   HOH W4156      29.195   0.822   3.786  1.00 40.55           O
ATOM   2866  O   HOH W4157      15.774  -2.195  11.976  1.00 39.79           O
ATOM   2867  O   HOH W4158      22.736   4.680   3.551  1.00 24.63           O
ATOM   2868  O   HOH W4159      10.086 -24.038  17.929  1.00 54.44           O
ATOM   2869  O   HOH W4161      37.774  -8.164  11.579  1.00 59.16           O
ATOM   2870  O   HOH W4162      25.882  18.452  33.331  1.00 33.59           O
ATOM   2871  O   HOH W4163      -0.430   0.356  12.041  1.00 45.32           O
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ATOM    2872  O    HOH W4164      -3.073  -7.128  24.073  1.00 45.12           O
ATOM    2873  O    HOH W4165      31.655  13.815   8.848  1.00 29.05           O
ATOM    2874  O    HOH W4166      17.133   8.014  -0.782  1.00 24.81           O
ATOM    2875  O    HOH W4167      11.582 -12.517  13.880  1.00 37.19           O
ATOM    2876  O    HOH W4168      15.057 -15.827  14.902  1.00 25.73           O
ATOM    2877  O    HOH W4169      12.130 -17.876  15.236  1.00 35.36           O
ATOM    2878  O    HOH W4170       7.663   8.075  46.234  1.00 31.45           O
ATOM    2879  O    HOH W4171       8.858  17.412  12.301  1.00 37.47           O
TER     2880       HOH W4171
END
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TABLE 5

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REMARK coordinates from restrained individual B-factor refinement
REMARK refinement resolution: 500.0 - 1.90 A
REMARK starting r= 0.2427 free_r= 0.2720
REMARK final    r= 0.2425 free_r= 0.2731
REMARK B rmsd for bonded mainchain atoms=  0.960  target= 1.5
REMARK B rmsd for bonded sidechain atoms=  1.085  target= 2.0
REMARK B rmsd for angle mainchain atoms=  1.688  target= 2.0
REMARK B rmsd for angle sidechain atoms=  1.768  target= 2.5
REMARK wa= 1.18715
REMARK rweight=0.298329
REMARK target= mlf  steps= 30
REMARK sg= C2 a= 120.188 b= 62.273 c= 51.673 alpha= 90 beta= 98.745 gamma= 90
REMARK parameter file 1  : CNX_TOPPAR:protein_rep.param
REMARK parameter file 2  : CNX_TOPPAR:water_rep.param
REMARK parameter file 3  : CNX_TOPPAR:ion.param
REMARK parameter file 4  : 35-ADP/35-ADP.param
REMARK molecular structure file: generate.psf
REMARK input coordinates: minimize.pdb
REMARK reflection file= ../data/x-ray_data.cv
REMARK ncs= none
REMARK B-correction resolution: 6.0 - 1.90
REMARK initial B-factor correction applied to fobs :
REMARK   B11=   0.036 B22=  -2.635 B33=   2.599
REMARK   B12=   0.000 B13=   0.515 B23=   0.000
REMARK B-factor correction applied to coordinate array B:    0.030
REMARK bulk solvent: (Mask) density level= 0.369861 e/A^3, B-factor= 96.7512 A^2
REMARK reflections with |Fobs|/sigma_F < 0.0 rejected
REMARK reflections with |Fobs| > 10000 * rms(Fobs) rejected
REMARK theoretical total number of refl. in resol. range:     29870 ( 100.0 % )
REMARK number of unobserved reflections (no entry or |F|=0):    330 (   1.1 % )
REMARK number of reflections rejected:                            0 (   0.0 % )
REMARK total number of reflections used:                      29540 (  98.9 % )
REMARK number of reflections in working set:                  28083 (  94.0 % )
REMARK number of reflections in test set:                      1457 (   4.9 % )
REMARK FILENAME="acps 35-ADP.pdb"

REMARK Written by CNX VERSION:2000
ATOM      1  CB  MET A1003      37.264   5.634  20.230  1.00 26.46           C
ATOM      2  CG  MET A1003      36.648   6.209  21.498  1.00 29.51           C
ATOM      3  SD  MET A1003      37.784   7.312  22.398  1.00 33.70           S
ATOM      4  CE  MET A1003      37.843   8.718  21.291  1.00 32.08           C
ATOM      5  C   MET A1003      35.048   5.262  19.102  1.00 23.04           C
ATOM      6  O   MET A1003      35.009   6.245  18.358  1.00 22.46           O
ATOM      7  N   MET A1003      37.108   4.155  18.256  1.00 24.80           N
ATOM      8  CA  MET A1003      36.389   4.622  19.479  1.00 24.32           C
ATOM      9  N   ILE A1004      33.957   4.690  19.606  1.00 22.15           N
ATOM     10  CA  ILE A1004      32.606   5.202  19.348  1.00 21.16           C
ATOM     11  CB  ILE A1004      31.535   4.120  19.670  1.00 21.51           C
ATOM     12  CG2 ILE A1004      30.122   4.710  19.558  1.00 21.66           C
ATOM     13  CG1 ILE A1004      31.696   2.927  18.722  1.00 21.75           C
ATOM     14  CD1 ILE A1004      30.823   1.734  19.074  1.00 22.20           C
ATOM     15  C   ILE A1004      32.361   6.417  20.245  1.00 20.57           C
ATOM     16  O   ILE A1004      32.773   6.416  21.407  1.00 21.36           O
ATOM     17  N   VAL A1005      31.705   7.448  19.713  1.00 19.47           N
ATOM     18  CA  VAL A1005      31.409   8.652  20.492  1.00 18.73           C
ATOM     19  CB  VAL A1005      32.308   9.852  20.042  1.00 19.66           C
ATOM     20  CG1 VAL A1005      33.779   9.530  20.319  1.00 20.39           C
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ATOM     21  CG2 VAL A1005      32.119  10.142  18.562  1.00 20.39           C
ATOM     22  C   VAL A1005      29.924   9.085  20.502  1.00 17.55           C
ATOM     23  O   VAL A1005      29.601  10.193  20.940  1.00 16.98           O
ATOM     24  N   GLY A1006      29.026   8.207  20.041  1.00 16.14           N
ATOM     25  CA  GLY A1006      27.593   8.513  20.046  1.00 14.83           C
ATOM     26  C   GLY A1006      26.725   7.566  19.216  1.00 13.78           C
ATOM     27  O   GLY A1006      27.223   6.982  18.257  1.00 12.47           O
ATOM     28  N   HIS A1007      25.442   7.409  19.581  1.00 13.88           N
ATOM     29  CA  HIS A1007      24.495   6.535  18.844  1.00 14.19           C
ATOM     30  CB  HIS A1007      24.638   5.080  19.332  1.00 14.36           C
ATOM     31  CG  HIS A1007      23.663   4.115  18.711  1.00 14.94           C
ATOM     32  CD2 HIS A1007      22.904   3.137  19.266  1.00 15.52           C
ATOM     33  ND1 HIS A1007      23.410   4.070  17.355  1.00 14.28           N
ATOM     34  CE1 HIS A1007      22.537   3.108  17.102  1.00 15.47           C
ATOM     35  NE2 HIS A1007      22.214   2.526  18.245  1.00 15.49           N
ATOM     36  C   HIS A1007      23.025   7.000  18.999  1.00 13.90           C
ATOM     37  O   HIS A1007      22.588   7.310  20.115  1.00 13.25           O
ATOM     38  N   GLY A1008      22.276   7.053  17.888  1.00 13.72           N
ATOM     39  CA  GLY A1008      20.870   7.476  17.931  1.00 13.61           C
ATOM     40  C   GLY A1008      19.944   6.833  16.890  1.00 13.86           C
ATOM     41  O   GLY A1008      20.402   6.498  15.795  1.00 13.86           O
ATOM     42  N   ILE A1009      18.653   6.649  17.218  1.00 13.29           N
ATOM     43  CA  ILE A1009      17.672   6.046  16.281  1.00 13.44           C
ATOM     44  CB  ILE A1009      17.342   4.554  16.639  1.00 14.13           C
ATOM     45  CG2 ILE A1009      18.619   3.696  16.642  1.00 13.71           C
ATOM     46  CG1 ILE A1009      16.638   4.503  18.003  1.00 13.45           C
ATOM     47  CD1 ILE A1009      16.175   3.134  18.434  1.00 15.16           C
ATOM     48  C   ILE A1009      16.318   6.799  16.257  1.00 14.09           C
ATOM     49  O   ILE A1009      16.033   7.589  17.165  1.00 12.83           O
ATOM     50  N   ASP A1010      15.491   6.537  15.232  1.00 14.68           N
ATOM     51  CA  ASP A1010      14.161   7.167  15.101  1.00 16.24           C
ATOM     52  CB  ASP A1010      14.287   8.580  14.496  1.00 17.11           C
ATOM     53  CG  ASP A1010      12.944   9.328  14.428  1.00 19.40           C
ATOM     54  OD1 ASP A1010      12.265   9.295  13.369  1.00 19.82           O
ATOM     55  OD2 ASP A1010      12.563   9.948  15.446  1.00 19.26           O
ATOM     56  C   ASP A1010      13.193   6.348  14.230  1.00 16.72           C
ATOM     57  O   ASP A1010      13.618   5.693  13.276  1.00 16.89           O
ATOM     58  N   ILE A1011      11.900   6.387  14.570  1.00 17.01           N
ATOM     59  CA  ILE A1011      10.850   5.706  13.796  1.00 17.33           C
ATOM     60  CB  ILE A1011      10.410   4.353  14.447  1.00 18.10           C
ATOM     61  CG2 ILE A1011       9.963   4.570  15.898  1.00 17.28           C
ATOM     62  CG1 ILE A1011       9.297   3.717  13.601  1.00 18.21           C
ATOM     63  CD1 ILE A1011       8.852   2.338  14.083  1.00 20.73           C
ATOM     64  C   ILE A1011       9.648   6.664  13.679  1.00 18.00           C
ATOM     65  O   ILE A1011       9.262   7.298  14.663  1.00 16.80           O
ATOM     66  N   GLU A1012       9.060   6.760  12.481  1.00 18.22           N
ATOM     67  CA  GLU A1012       7.951   7.690  12.220  1.00 19.38           C
ATOM     68  CB  GLU A1012       8.537   8.972  11.609  1.00 20.91           C
ATOM     69  CG  GLU A1012       7.537  10.036  11.186  1.00 23.69           C
ATOM     70  CD  GLU A1012       7.065  10.909  12.336  1.00 24.81           C
ATOM     71  OE1 GLU A1012       7.432  10.632  13.499  1.00 24.64           O
ATOM     72  OE2 GLU A1012       6.318  11.878  12.070  1.00 27.04           O
ATOM     73  C   GLU A1012       6.845   7.146  11.293  1.00 19.45           C
ATOM     74  O   GLU A1012       7.119   6.397  10.358  1.00 17.84           O
ATOM     75  N   GLU A1013       5.599   7.538  11.557  1.00 20.13           N
ATOM     76  CA  GLU A1013       4.456   7.119  10.735  1.00 21.62           C
ATOM     77  CB  GLU A1013       3.178   7.146  11.584  1.00 24.29           C
ATOM     78  CG  GLU A1013       1.916   6.753  10.845  1.00 28.34           C
ATOM     79  CD  GLU A1013       0.710   6.656  11.766  1.00 30.69           C
ATOM     80  OE1 GLU A1013      -0.400   6.361  11.267  1.00 33.13           O
ATOM     81  OE2 GLU A1013       0.871   6.872  12.990  1.00 33.49           O
ATOM     82  C   GLU A1013       4.302   8.061   9.521  1.00 21.59           C
ATOM     83  O   GLU A1013       4.247   9.280   9.682  1.00 20.05           O
ATOM     84  N   LEU A1014       4.223   7.493   8.316  1.00 21.61           N
ATOM     85  CA  LEU A1014       4.104   8.288   7.087  1.00 22.02           C
ATOM     86  CB  LEU A1014       4.191   7.365   5.857  1.00 23.16           C
ATOM     87  CG  LEU A1014       5.502   6.571   5.745  1.00 24.38           C
ATOM     88  CD1 LEU A1014       5.454   5.622   4.551  1.00 25.08           C
ATOM     89  CD2 LEU A1014       6.667   7.538   5.604  1.00 25.38           C
ATOM     90  C   LEU A1014       2.841   9.158   7.006  1.00 22.02           C
ATOM     91  O   LEU A1014       2.867  10.240   6.419  1.00 21.55           O
ATOM     92  N   ALA A1015       1.742   8.691   7.593  1.00 22.06           N
ATOM     93  CA  ALA A1015       0.488   9.452   7.595  1.00 22.62           C
ATOM     94  CB  ALA A1015      -0.605   8.656   8.299  1.00 22.21           C
ATOM     95  C   ALA A1015       0.644  10.817   8.274  1.00 22.87           C
ATOM     96  O   ALA A1015       0.005  11.796   7.875  1.00 23.00           O
ATOM     97  N   SER A1016       1.482  10.876   9.307  1.00 23.27           N
ATOM     98  CA  SER A1016       1.716  12.123  10.034  1.00 23.77           C
ATOM     99  CB  SER A1016       2.535  11.860  11.305  1.00 24.30           C
ATOM    100  OG  SER A1016       1.890  10.919  12.145  1.00 26.09           O
ATOM    101  C   SER A1016       2.443  13.146   9.162  1.00 23.41           C
ATOM    102  O   SER A1016       2.173  14.348   9.249  1.00 23.19           O
ATOM    103  N   ILE A1017       3.378  12.673   8.340  1.00 23.05           N
ATOM    104  CA  ILE A1017       4.118  13.566   7.450  1.00 22.92           C
ATOM    105  CB  ILE A1017       5.355  12.860   6.838  1.00 23.00           C
ATOM    106  CG2 ILE A1017       6.107  13.823   5.918  1.00 23.26           C
ATOM    107  CG1 ILE A1017       6.289  12.365   7.951  1.00 23.63           C
ATOM    108  CD1 ILE A1017       6.896  13.467   8.810  1.00 22.84           C
ATOM    109  C   ILE A1017       3.204  14.053   6.308  1.00 23.44           C
ATOM    110  O   ILE A1017       3.276  15.218   5.896  1.00 23.11           O
ATOM    111  N   GLU A1018       2.341  13.170   5.805  1.00 22.98           N
ATOM    112  CA  GLU A1018       1.443  13.549   4.714  1.00 24.09           C
ATOM    113  CB  GLU A1018       0.729  12.306   4.147  1.00 25.23           C
ATOM    114  CG  GLU A1018      -0.252  12.592   2.997  1.00 27.75           C
ATOM    115  CD  GLU A1018      -0.632  11.345   2.190  1.00 29.64           C
ATOM    116  OE1 GLU A1018      -0.807  10.255   2.783  1.00 30.50           O
ATOM    117  OE2 GLU A1018      -0.771  11.459   0.952  1.00 30.61           O
ATOM    118  C   GLU A1018       0.427  14.612   5.150  1.00 24.15           C
ATOM    119  O   GLU A1018       0.142  15.550   4.395  1.00 23.68           O
ATOM    120  N   SER A1019      -0.103  14.481   6.367  1.00 23.86           N
ATOM    121  CA  SER A1019      -1.078  15.445   6.879  1.00 24.87           C
ATOM    122  CB  SER A1019      -1.641  14.993   8.234  1.00 24.60           C
ATOM    123  OG  SER A1019      -2.387  13.794   8.120  1.00 26.37           O
ATOM    124  C   SER A1019      -0.450  16.824   7.045  1.00 25.06           C
ATOM    125  O   SER A1019      -1.077  17.836   6.741  1.00 25.39           O
ATOM    126  N   ALA A1020       0.790  16.856   7.525  1.00 25.98           N
ATOM    127  CA  ALA A1020       1.508  18.112   7.748  1.00 26.26           C
ATOM    128  CB  ALA A1020       2.869  17.829   8.399  1.00 26.48           C
ATOM    129  C   ALA A1020       1.695  18.909   6.460  1.00 26.83           C
ATOM    130  O   ALA A1020       1.589  20.138   6.463  1.00 26.25           O
ATOM    131  N   VAL A1021       1.974  18.210   5.364  1.00 27.31           N
ATOM    132  CA  VAL A1021       2.166  18.855   4.064  1.00 28.77           C
ATOM    133  CB  VAL A1021       2.767  17.868   3.029  1.00 28.35           C
ATOM    134  CG1 VAL A1021       2.801  18.510   1.639  1.00 28.63           C
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ATOM    135  CG2 VAL A1021       4.176  17.461   3.457  1.00 28.09           C
ATOM    136  C   VAL A1021       0.845  19.396   3.512  1.00 30.16           C
ATOM    137  O   VAL A1021       0.775  20.541   3.054  1.00 29.31           O
ATOM    138  N   THR A1022      -0.195  18.565   3.557  1.00 31.76           N
ATOM    139  CA  THR A1022      -1.515  18.951   3.057  1.00 33.81           C
ATOM    140  CB  THR A1022      -2.541  17.798   3.230  1.00 33.53           C
ATOM    141  OG1 THR A1022      -2.119  16.663   2.466  1.00 33.79           O
ATOM    142  CG2 THR A1022      -3.926  18.224   2.749  1.00 33.72           C
ATOM    143  C   THR A1022      -2.032  20.183   3.790  1.00 34.97           C
ATOM    144  O   THR A1022      -2.802  20.968   3.237  1.00 36.01           O
ATOM    145  N   ARG A1023      -1.585  20.346   5.029  1.00 36.61           N
ATOM    146  CA  ARG A1023      -1.988  21.462   5.876  1.00 38.01           C
ATOM    147  CB  ARG A1023      -1.371  21.297   7.267  1.00 38.96           C
ATOM    148  CG  ARG A1023      -2.284  21.702   8.409  1.00 40.44           C
ATOM    149  CD  ARG A1023      -2.443  20.556   9.393  1.00 41.63           C
ATOM    150  NE  ARG A1023      -1.184  20.219  10.053  1.00 42.83           N
ATOM    151  CZ  ARG A1023      -1.000  19.134  10.800  1.00 43.45           C
ATOM    152  NH1 ARG A1023      -1.997  18.277  10.981  1.00 43.85           N
ATOM    153  NH2 ARG A1023       0.178  18.906  11.367  1.00 43.30           N
ATOM    154  C   ARG A1023      -1.603  22.825   5.302  1.00 38.55           C
ATOM    155  O   ARG A1023      -2.143  23.850   5.722  1.00 38.81           O
ATOM    156  N   HIS A1024      -0.663  22.842   4.359  1.00 38.91           N
ATOM    157  CA  HIS A1024      -0.244  24.096   3.733  1.00 38.99           C
ATOM    158  CB  HIS A1024      -1.432  24.654   2.935  1.00 40.09           C
ATOM    159  CG  HIS A1024      -1.184  25.993   2.315  1.00 41.43           C
ATOM    160  CD2 HIS A1024      -1.936  27.119   2.304  1.00 41.88           C
ATOM    161  ND1 HIS A1024      -0.058  26.276   1.573  1.00 41.78           N
ATOM    162  CE1 HIS A1024      -0.126  27.519   1.131  1.00 42.17           C
ATOM    163  NE2 HIS A1024      -1.257  28.053   1.560  1.00 42.70           N
ATOM    164  C   HIS A1024       0.245  25.107   4.782  1.00 38.60           C
ATOM    165  O   HIS A1024      -0.251  26.236   4.857  1.00 38.61           O
ATOM    166  N   GLU A1025       1.234  24.696   5.575  1.00 37.69           N
ATOM    167  CA  GLU A1025       1.784  25.533   6.643  1.00 36.89           C
ATOM    168  CB  GLU A1025       1.545  24.854   7.995  1.00 37.94           C
ATOM    169  CG  GLU A1025       2.255  23.508   8.126  1.00 39.13           C
ATOM    170  CD  GLU A1025       2.003  22.828   9.459  1.00 40.28           C
ATOM    171  OE1 GLU A1025       0.853  22.405   9.709  1.00 41.24           O
ATOM    172  OE2 GLU A1025       2.959  22.716  10.258  1.00 40.84           O
ATOM    173  C   GLU A1025       3.280  25.856   6.518  1.00 35.45           C
ATOM    174  O   GLU A1025       3.857  26.466   7.424  1.00 35.71           O
ATOM    175  N   GLY A1026       3.906  25.441   5.420  1.00 33.22           N
ATOM    176  CA  GLY A1026       5.324  25.708   5.220  1.00 30.99           C
ATOM    177  C   GLY A1026       6.265  24.668   5.819  1.00 29.44           C
ATOM    178  O   GLY A1026       7.448  24.943   6.040  1.00 28.80           O
ATOM    179  N   PHE A1027       5.743  23.470   6.073  1.00 27.49           N
ATOM    180  CA  PHE A1027       6.524  22.378   6.657  1.00 26.42           C
ATOM    181  CB  PHE A1027       5.618  21.149   6.830  1.00 26.50           C
ATOM    182  CG  PHE A1027       6.272  19.995   7.541  1.00 26.07           C
ATOM    183  CD1 PHE A1027       6.650  20.103   8.876  1.00 25.99           C
ATOM    184  CD2 PHE A1027       6.499  18.790   6.873  1.00 26.17           C
ATOM    185  CE1 PHE A1027       7.243  19.028   9.541  1.00 26.70           C
ATOM    186  CE2 PHE A1027       7.091  17.711   7.527  1.00 26.08           C
ATOM    187  CZ  PHE A1027       7.465  17.828   8.863  1.00 26.23           C
ATOM    188  C   PHE A1027       7.776  21.998   5.852  1.00 25.70           C
ATOM    189  O   PHE A1027       8.892  22.017   6.377  1.00 25.54           O
ATOM    190  N   ALA A1028       7.598  21.656   4.579  1.00 24.86           N
ATOM    191  CA  ALA A1028       8.726  21.260   3.737  1.00 24.85           C
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ATOM    192  CB   ALA A1028       8.232  20.919   2.333  1.00 24.87           C
ATOM    193  C    ALA A1028       9.824  22.325   3.661  1.00 25.07           C
ATOM    194  O    ALA A1028      11.018  22.009   3.685  1.00 24.02           O
ATOM    195  N    LYS A1029       9.417  23.587   3.571  1.00 25.80           N
ATOM    196  CA   LYS A1029      10.364  24.695   3.488  1.00 26.80           C
ATOM    197  CB   LYS A1029       9.598  26.000   3.222  1.00 28.18           C
ATOM    198  CG   LYS A1029      10.449  27.200   2.800  1.00 30.30           C
ATOM    199  CD   LYS A1029      11.251  27.769   3.958  1.00 32.28           C
ATOM    200  CE   LYS A1029      11.799  29.151   3.636  1.00 33.23           C
ATOM    201  NZ   LYS A1029      10.702  30.153   3.506  1.00 34.55           N
ATOM    202  C    LYS A1029      11.197  24.806   4.771  1.00 26.54           C
ATOM    203  O    LYS A1029      12.344  25.244   4.738  1.00 26.39           O
ATOM    204  N    ARG A1030      10.624  24.394   5.897  1.00 26.43           N
ATOM    205  CA   ARG A1030      11.327  24.464   7.178  1.00 26.50           C
ATOM    206  CB   ARG A1030      10.312  24.485   8.334  1.00 27.57           C
ATOM    207  CG   ARG A1030      10.945  24.487   9.727  1.00 30.51           C
ATOM    208  CD   ARG A1030       9.933  24.858  10.820  1.00 31.96           C
ATOM    209  NE   ARG A1030       8.887  23.851  11.008  1.00 32.84           N
ATOM    210  CZ   ARG A1030       9.033  22.740  11.723  1.00 33.04           C
ATOM    211  NH1  ARG A1030      10.184  22.482  12.327  1.00 33.30           N
ATOM    212  NH2  ARG A1030       8.028  21.884  11.836  1.00 33.60           N
ATOM    213  C    ARG A1030      12.325  23.327   7.407  1.00 25.55           C
ATOM    214  O    ARG A1030      13.402  23.539   7.976  1.00 25.72           O
ATOM    215  N    VAL A1031      11.967  22.130   6.952  1.00 24.16           N
ATOM    216  CA   VAL A1031      12.795  20.934   7.134  1.00 23.09           C
ATOM    217  CB   VAL A1031      11.903  19.655   7.150  1.00 23.53           C
ATOM    218  CG1  VAL A1031      12.765  18.398   7.339  1.00 23.93           C
ATOM    219  CG2  VAL A1031      10.874  19.754   8.258  1.00 22.96           C
ATOM    220  C    VAL A1031      13.932  20.684   6.134  1.00 22.57           C
ATOM    221  O    VAL A1031      14.952  20.094   6.504  1.00 22.31           O
ATOM    222  N    LEU A1032      13.765  21.127   4.887  1.00 21.47           N
ATOM    223  CA   LEU A1032      14.764  20.888   3.830  1.00 21.78           C
ATOM    224  CB   LEU A1032      14.062  20.277   2.607  1.00 21.38           C
ATOM    225  CG   LEU A1032      13.126  19.073   2.773  1.00 20.75           C
ATOM    226  CD1  LEU A1032      12.446  18.779   1.428  1.00 21.22           C
ATOM    227  CD2  LEU A1032      13.912  17.851   3.249  1.00 20.06           C
ATOM    228  C    LEU A1032      15.565  22.107   3.355  1.00 22.39           C
ATOM    229  O    LEU A1032      15.061  23.233   3.375  1.00 22.40           O
ATOM    230  N    THR A1033      16.806  21.875   2.917  1.00 23.26           N
ATOM    231  CA   THR A1033      17.661  22.951   2.394  1.00 24.31           C
ATOM    232  CB   THR A1033      19.171  22.577   2.366  1.00 24.32           C
ATOM    233  OG1  THR A1033      19.380  21.472   1.473  1.00 24.43           O
ATOM    234  CG2  THR A1033      19.671  22.217   3.756  1.00 23.93           C
ATOM    235  C    THR A1033      17.255  23.215   0.945  1.00 25.20           C
ATOM    236  O    THR A1033      16.343  22.570   0.426  1.00 24.87           O
ATOM    237  N    ALA A1034      17.937  24.158   0.297  1.00 25.70           N
ATOM    238  CA   ALA A1034      17.650  24.476  -1.100  1.00 26.57           C
ATOM    239  CB   ALA A1034      18.485  25.676  -1.548  1.00 27.15           C
ATOM    240  C    ALA A1034      17.943  23.270  -1.997  1.00 26.78           C
ATOM    241  O    ALA A1034      17.115  22.896  -2.829  1.00 27.20           O
ATOM    242  N    LEU A1035      19.122  22.672  -1.831  1.00 26.52           N
ATOM    243  CA   LEU A1035      19.513  21.503  -2.623  1.00 27.27           C
ATOM    244  CB   LEU A1035      20.943  21.063  -2.276  1.00 27.34           C
ATOM    245  CG   LEU A1035      22.137  21.950  -2.658  1.00 28.71           C
ATOM    246  CD1  LEU A1035      23.388  21.443  -1.953  1.00 28.34           C
ATOM    247  CD2  LEU A1035      22.348  21.949  -4.171  1.00 29.34           C
ATOM    248  C    LEU A1035      18.549  20.327  -2.408  1.00 26.73           C
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ATOM    249  O    LEU A1035       18.124  19.679  -3.369  1.00 26.11          O
ATOM    250  N    GLU A1036       18.209  20.048  -1.151  1.00 26.36          N
ATOM    251  CA   GLU A1036       17.285  18.958  -0.852  1.00 26.00          C
ATOM    252  CB   GLU A1036       17.119  18.801   0.675  1.00 24.96          C
ATOM    253  CG   GLU A1036       18.307  18.111   1.367  1.00 22.07          C
ATOM    254  CD   GLU A1036       18.254  18.150   2.900  1.00 22.03          C
ATOM    255  OE1  GLU A1036       18.819  17.229   3.540  1.00 20.25          O
ATOM    256  OE2  GLU A1036       17.671  19.102   3.472  1.00 19.80          O
ATOM    257  C    GLU A1036       15.934  19.228  -1.526  1.00 27.44          C
ATOM    258  O    GLU A1036       15.296  18.314  -2.060  1.00 26.45          O
ATOM    259  N    MET A1037       15.514  20.493  -1.525  1.00 28.51          N
ATOM    260  CA   MET A1037       14.242  20.888  -2.132  1.00 30.20          C
ATOM    261  CB   MET A1037       13.979  22.377  -1.877  1.00 31.18          C
ATOM    262  CG   MET A1037       12.608  22.872  -2.324  1.00 32.64          C
ATOM    263  SD   MET A1037       11.236  22.231  -1.342  1.00 35.22          S
ATOM    264  CE   MET A1037        9.873  22.344  -2.511  1.00 34.31          C
ATOM    265  C    MET A1037       14.192  20.608  -3.637  1.00 30.82          C
ATOM    266  O    MET A1037       13.141  20.248  -4.176  1.00 31.12          O
ATOM    267  N    GLU A1038       15.320  20.780  -4.317  1.00 31.36          N
ATOM    268  CA   GLU A1038       15.371  20.526  -5.756  1.00 31.95          C
ATOM    269  CB   GLU A1038       16.773  20.820  -6.296  1.00 33.04          C
ATOM    270  CG   GLU A1038       17.111  22.300  -6.367  1.00 35.12          C
ATOM    271  CD   GLU A1038       18.578  22.550  -6.673  1.00 36.56          C
ATOM    272  OE1  GLU A1038       18.943  23.713  -6.941  1.00 37.89          O
ATOM    273  OE2  GLU A1038       19.371  21.585  -6.639  1.00 37.49          O
ATOM    274  C    GLU A1038       14.988  19.080  -6.072  1.00 31.21          C
ATOM    275  O    GLU A1038       14.268  18.816  -7.036  1.00 30.88          O
ATOM    276  N    ARG A1039       15.474  18.151  -5.253  1.00 29.97          N
ATOM    277  CA   ARG A1039       15.188  16.730  -5.427  1.00 28.84          C
ATOM    278  CB   ARG A1039       16.086  15.913  -4.483  1.00 29.69          C
ATOM    279  CG   ARG A1039       15.853  14.402  -4.480  1.00 31.09          C
ATOM    280  CD   ARG A1039       16.329  13.727  -5.758  1.00 32.23          C
ATOM    281  NE   ARG A1039       16.125  12.280  -5.708  1.00 33.37          N
ATOM    282  CZ   ARG A1039       16.076  11.492  -6.780  1.00 33.30          C
ATOM    283  NH1  ARG A1039       16.222  12.007  -7.992  1.00 33.19          N
ATOM    284  NH2  ARG A1039       15.852  10.191  -6.641  1.00 32.92          N
ATOM    285  C    ARG A1039       13.709  16.442  -5.145  1.00 27.71          C
ATOM    286  O    ARG A1039       13.059  15.705  -5.887  1.00 26.61          O
ATOM    287  N    PHE A1040       13.189  17.041  -4.076  1.00 26.75          N
ATOM    288  CA   PHE A1040       11.795  16.867  -3.659  1.00 26.16          C
ATOM    289  CB   PHE A1040       11.532  17.729  -2.405  1.00 25.81          C
ATOM    290  CG   PHE A1040       10.111  17.665  -1.886  1.00 25.91          C
ATOM    291  CD1  PHE A1040        9.615  16.508  -1.292  1.00 25.16          C
ATOM    292  CD2  PHE A1040        9.275  18.778  -1.979  1.00 25.61          C
ATOM    293  CE1  PHE A1040        8.309  16.457  -0.798  1.00 25.37          C
ATOM    294  CE2  PHE A1040        7.966  18.740  -1.490  1.00 25.17          C
ATOM    295  CZ   PHE A1040        7.481  17.579  -0.897  1.00 25.69          C
ATOM    296  C    PHE A1040       10.782  17.210  -4.760  1.00 25.80          C
ATOM    297  O    PHE A1040        9.835  16.460  -4.990  1.00 25.42          O
ATOM    298  N    THR A1041       10.984  18.332  -5.443  1.00 25.73          N
ATOM    299  CA   THR A1041       10.053  18.759  -6.493  1.00 26.24          C
ATOM    300  CB   THR A1041       10.257  20.259  -6.836  1.00 26.86          C
ATOM    301  OG1  THR A1041       11.634  20.507  -7.154  1.00 26.58          O
ATOM    302  CG2  THR A1041        9.849  21.130  -5.656  1.00 26.06          C
ATOM    303  C    THR A1041       10.066  17.948  -7.800  1.00 26.59          C
ATOM    304  O    THR A1041        9.149  18.071  -8.620  1.00 27.01          O
ATOM    305  N    SER A1042       11.080  17.111  -7.996  1.00 26.31          N
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ATOM    306  CA  SER A1042      11.158  16.305  -9.222  1.00 26.03           C
ATOM    307  CB  SER A1042      12.618  16.106  -9.631  1.00 26.30           C
ATOM    308  OG  SER A1042      13.287  15.231  -8.737  1.00 27.19           O
ATOM    309  C   SER A1042      10.488  14.935  -9.082  1.00 25.97           C
ATOM    310  O   SER A1042      10.354  14.198 -10.063  1.00 25.27           O
ATOM    311  N   LEU A1043      10.064  14.599  -7.865  1.00 25.25           N
ATOM    312  CA  LEU A1043       9.431  13.310  -7.601  1.00 25.51           C
ATOM    313  CB  LEU A1043       9.906  12.765  -6.245  1.00 24.11           C
ATOM    314  CG  LEU A1043      11.425  12.571  -6.118  1.00 24.06           C
ATOM    315  CD1 LEU A1043      11.768  12.080  -4.715  1.00 22.60           C
ATOM    316  CD2 LEU A1043      11.914  11.571  -7.164  1.00 23.86           C
ATOM    317  C   LEU A1043       7.907  13.389  -7.634  1.00 25.82           C
ATOM    318  O   LEU A1043       7.333  14.475  -7.575  1.00 26.42           O
ATOM    319  N   LYS A1044       7.256  12.233  -7.723  1.00 26.67           N
ATOM    320  CA  LYS A1044       5.802  12.184  -7.785  1.00 27.60           C
ATOM    321  CB  LYS A1044       5.361  11.803  -9.200  1.00 29.18           C
ATOM    322  CG  LYS A1044       5.705  10.369  -9.562  1.00 31.06           C
ATOM    323  CD  LYS A1044       5.359  10.045 -10.999  1.00 32.81           C
ATOM    324  CE  LYS A1044       5.572   8.567 -11.282  1.00 33.54           C
ATOM    325  NZ  LYS A1044       4.702   7.716 -10.419  1.00 34.84           N
ATOM    326  C   LYS A1044       5.159  11.211  -6.795  1.00 27.94           C
ATOM    327  O   LYS A1044       5.774  10.227  -6.367  1.00 27.61           O
ATOM    328  N   GLY A1045       3.904  11.500  -6.464  1.00 27.68           N
ATOM    329  CA  GLY A1045       3.124  10.671  -5.562  1.00 28.74           C
ATOM    330  C   GLY A1045       3.741  10.224  -4.252  1.00 28.99           C
ATOM    331  O   GLY A1045       4.282  11.024  -3.487  1.00 29.00           O
ATOM    332  N   ARG A1046       3.643   8.925  -3.998  1.00 29.30           N
ATOM    333  CA  ARG A1046       4.155   8.320  -2.776  1.00 30.48           C
ATOM    334  CB  ARG A1046       3.790   6.833  -2.754  1.00 32.57           C
ATOM    335  CG  ARG A1046       3.044   6.390  -1.513  1.00 35.84           C
ATOM    336  CD  ARG A1046       2.680   4.922  -1.598  1.00 38.51           C
ATOM    337  NE  ARG A1046       2.023   4.445  -0.384  1.00 41.12           N
ATOM    338  CZ  ARG A1046       1.613   3.194  -0.204  1.00 42.33           C
ATOM    339  NH1 ARG A1046       1.024   2.842   0.931  1.00 42.60           N
ATOM    340  NH2 ARG A1046       1.793   2.292  -1.164  1.00 43.25           N
ATOM    341  C   ARG A1046       5.663   8.479  -2.582  1.00 29.60           C
ATOM    342  O   ARG A1046       6.128   8.686  -1.460  1.00 28.95           O
ATOM    343  N   ARG A1047       6.423   8.375  -3.668  1.00 28.70           N
ATOM    344  CA  ARG A1047       7.875   8.495  -3.585  1.00 28.01           C
ATOM    345  CB  ARG A1047       8.512   8.167  -4.943  1.00 29.65           C
ATOM    346  CG  ARG A1047       9.566   7.069  -4.869  1.00 32.09           C
ATOM    347  CD  ARG A1047       9.831   6.426  -6.228  1.00 34.53           C
ATOM    348  NE  ARG A1047       8.601   5.910  -6.825  1.00 36.57           N
ATOM    349  CZ  ARG A1047       8.548   5.138  -7.906  1.00 37.35           C
ATOM    350  NH1 ARG A1047       7.373   4.727  -8.368  1.00 38.05           N
ATOM    351  NH2 ARG A1047       9.663   4.767  -8.523  1.00 38.02           N
ATOM    352  C   ARG A1047       8.288   9.890  -3.117  1.00 26.86           C
ATOM    353  O   ARG A1047       9.309  10.048  -2.444  1.00 25.61           O
ATOM    354  N   GLN A1048       7.481  10.891  -3.464  1.00 25.04           N
ATOM    355  CA  GLN A1048       7.739  12.277  -3.079  1.00 24.33           C
ATOM    356  CB  GLN A1048       6.733  13.217  -3.779  1.00 25.19           C
ATOM    357  CG  GLN A1048       7.138  14.694  -3.774  1.00 26.24           C
ATOM    358  CD  GLN A1048       6.221  15.581  -4.620  1.00 26.41           C
ATOM    359  OE1 GLN A1048       6.617  16.664  -5.047  1.00 26.86           O
ATOM    360  NE2 GLN A1048       4.994  15.127  -4.853  1.00 27.01           N
ATOM    361  C   GLN A1048       7.632  12.442  -1.553  1.00 23.25           C
ATOM    362  O   GLN A1048       8.463  13.110  -0.935  1.00 23.01           O
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ATOM    363  N   ILE A1049       6.615  11.830  -0.949  1.00 22.49           N
ATOM    364  CA  ILE A1049       6.423  11.919   0.504  1.00 22.00           C
ATOM    365  CB  ILE A1049       5.011  11.414   0.916  1.00 23.38           C
ATOM    366  CG2 ILE A1049       4.810  11.564   2.421  1.00 23.48           C
ATOM    367  CG1 ILE A1049       3.928  12.197   0.161  1.00 24.39           C
ATOM    368  CD1 ILE A1049       3.923  13.695   0.424  1.00 25.65           C
ATOM    369  C   ILE A1049       7.496  11.118   1.274  1.00 21.25           C
ATOM    370  O   ILE A1049       7.940  11.537   2.347  1.00 19.66           O
ATOM    371  N   GLU A1050       7.913   9.975   0.724  1.00 20.69           N
ATOM    372  CA  GLU A1050       8.939   9.146   1.372  1.00 20.67           C
ATOM    373  CB  GLU A1050       9.093   7.794   0.650  1.00 22.03           C
ATOM    374  CG  GLU A1050      10.362   7.017   1.051  1.00 23.69           C
ATOM    375  CD  GLU A1050      10.385   6.625   2.520  1.00 24.98           C
ATOM    376  OE1 GLU A1050      11.498   6.519   3.095  1.00 23.91           O
ATOM    377  OE2 GLU A1050       9.292   6.409   3.097  1.00 25.89           O
ATOM    378  C   GLU A1050      10.298   9.851   1.430  1.00 19.72           C
ATOM    379  O   GLU A1050      11.073   9.634   2.367  1.00 19.12           O
ATOM    380  N   TYR A1051      10.604  10.680   0.431  1.00 18.43           N
ATOM    381  CA  TYR A1051      11.878  11.400   0.435  1.00 17.86           C
ATOM    382  CB  TYR A1051      12.110  12.129  -0.902  1.00 18.12           C
ATOM    383  CG  TYR A1051      13.379  12.970  -0.932  1.00 17.88           C
ATOM    384  CD1 TYR A1051      13.372  14.307  -0.518  1.00 17.74           C
ATOM    385  CE1 TYR A1051      14.547  15.076  -0.516  1.00 17.82           C
ATOM    386  CD2 TYR A1051      14.592  12.419  -1.345  1.00 17.56           C
ATOM    387  CE2 TYR A1051      15.770  13.176  -1.344  1.00 18.21           C
ATOM    388  CZ  TYR A1051      15.740  14.501  -0.929  1.00 18.16           C
ATOM    389  OH  TYR A1051      16.908  15.237  -0.923  1.00 18.28           O
ATOM    390  C   TYR A1051      11.915  12.409   1.590  1.00 17.91           C
ATOM    391  O   TYR A1051      12.927  12.525   2.290  1.00 16.53           O
ATOM    392  N   LEU A1052      10.810  13.137   1.778  1.00 17.38           N
ATOM    393  CA  LEU A1052      10.709  14.131   2.851  1.00 17.07           C
ATOM    394  CB  LEU A1052       9.392  14.917   2.731  1.00 17.53           C
ATOM    395  CG  LEU A1052       8.985  15.844   3.890  1.00 17.80           C
ATOM    396  CD1 LEU A1052      10.096  16.844   4.191  1.00 18.32           C
ATOM    397  CD2 LEU A1052       7.693  16.573   3.524  1.00 17.67           C
ATOM    398  C   LEU A1052      10.784  13.448   4.219  1.00 16.62           C
ATOM    399  O   LEU A1052      11.544  13.874   5.093  1.00 16.61           O
ATOM    400  N   ALA A1053      10.006  12.383   4.394  1.00 15.83           N
ATOM    401  CA  ALA A1053       9.985  11.645   5.662  1.00 15.97           C
ATOM    402  CB  ALA A1053       8.974  10.516   5.587  1.00 15.80           C
ATOM    403  C   ALA A1053      11.362  11.091   6.038  1.00 15.64           C
ATOM    404  O   ALA A1053      11.750  11.129   7.208  1.00 15.53           O
ATOM    405  N   GLY A1054      12.094  10.573   5.054  1.00 14.85           N
ATOM    406  CA  GLY A1054      13.420  10.028   5.327  1.00 14.89           C
ATOM    407  C   GLY A1054      14.431  11.073   5.789  1.00 14.97           C
ATOM    408  O   GLY A1054      15.243  10.820   6.689  1.00 14.15           O
ATOM    409  N   ARG A1055      14.403  12.250   5.169  1.00 14.68           N
ATOM    410  CA  ARG A1055      15.327  13.313   5.553  1.00 15.29           C
ATOM    411  CB  ARG A1055      15.257  14.462   4.533  1.00 14.70           C
ATOM    412  CG  ARG A1055      16.364  14.420   3.438  1.00 16.14           C
ATOM    413  CD  ARG A1055      16.452  13.082   2.658  1.00 16.61           C
ATOM    414  NE  ARG A1055      17.610  13.039   1.745  1.00 16.90           N
ATOM    415  CZ  ARG A1055      17.966  11.976   1.021  1.00 17.56           C
ATOM    416  NH1 ARG A1055      17.265  10.850   1.093  1.00 16.02           N
ATOM    417  NH2 ARG A1055      19.028  12.034   0.215  1.00 18.06           N
ATOM    418  C   ARG A1055      15.010  13.804   6.980  1.00 15.61           C
ATOM    419  O   ARG A1055      15.909  14.138   7.755  1.00 15.05           O
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ATOM    420  N    TRP A1056      13.731  13.826   7.333  1.00 15.92           N
ATOM    421  CA   TRP A1056      13.324  14.252   8.676  1.00 17.44           C
ATOM    422  CB   TRP A1056      11.791  14.409   8.706  1.00 20.42           C
ATOM    423  CG   TRP A1056      11.151  14.202  10.044  1.00 24.52           C
ATOM    424  CD2  TRP A1056      10.650  15.212  10.921  1.00 26.47           C
ATOM    425  CE2  TRP A1056      10.140  14.556  12.065  1.00 27.71           C
ATOM    426  CE3  TRP A1056      10.581  16.607  10.854  1.00 27.13           C
ATOM    427  CD1  TRP A1056      10.931  13.005  10.673  1.00 25.93           C
ATOM    428  NE1  TRP A1056      10.325  13.211  11.885  1.00 27.77           N
ATOM    429  CZ2  TRP A1056       9.567  15.250  13.133  1.00 28.62           C
ATOM    430  CZ3  TRP A1056      10.012  17.297  11.915  1.00 28.11           C
ATOM    431  CH2  TRP A1056       9.512  16.617  13.041  1.00 29.24           C
ATOM    432  C    TRP A1056      13.807  13.259   9.758  1.00 16.63           C
ATOM    433  O    TRP A1056      14.339  13.661  10.813  1.00 14.62           O
ATOM    434  N    SER A1057      13.645  11.965   9.477  1.00 15.34           N
ATOM    435  CA   SER A1057      14.034  10.892  10.404  1.00 14.89           C
ATOM    436  CB   SER A1057      13.509   9.549   9.864  1.00 16.31           C
ATOM    437  OG   SER A1057      13.653   8.482  10.792  1.00 15.29           O
ATOM    438  C    SER A1057      15.558  10.833  10.624  1.00 14.80           C
ATOM    439  O    SER A1057      16.033  10.618  11.748  1.00 13.11           O
ATOM    440  N    ALA A1058      16.326  11.043   9.560  1.00 13.86           N
ATOM    441  CA   ALA A1058      17.784  11.015   9.670  1.00 14.03           C
ATOM    442  CB   ALA A1058      18.408  11.077   8.283  1.00 14.39           C
ATOM    443  C    ALA A1058      18.326  12.162  10.528  1.00 14.15           C
ATOM    444  O    ALA A1058      19.253  11.972  11.326  1.00 12.67           O
ATOM    445  N    LYS A1059      17.760  13.356  10.346  1.00 14.25           N
ATOM    446  CA   LYS A1059      18.198  14.530  11.102  1.00 14.94           C
ATOM    447  CB   LYS A1059      17.561  15.807  10.511  1.00 14.63           C
ATOM    448  CG   LYS A1059      18.030  16.077   9.061  1.00 15.21           C
ATOM    449  CD   LYS A1059      17.605  17.445   8.497  1.00 14.78           C
ATOM    450  CE   LYS A1059      18.198  17.662   7.096  1.00 15.27           C
ATOM    451  NZ   LYS A1059      17.780  18.955   6.460  1.00 14.73           N
ATOM    452  C    LYS A1059      17.902  14.382  12.597  1.00 15.88           C
ATOM    453  O    LYS A1059      18.726  14.755  13.441  1.00 15.17           O
ATOM    454  N    GLU A1060      16.743  13.819  12.933  1.00 15.81           N
ATOM    455  CA   GLU A1060      16.395  13.609  14.337  1.00 16.66           C
ATOM    456  CB   GLU A1060      14.943  13.142  14.474  1.00 18.92           C
ATOM    457  CG   GLU A1060      13.922  14.183  14.023  1.00 23.44           C
ATOM    458  CD   GLU A1060      12.804  14.369  15.031  1.00 26.75           C
ATOM    459  OE1  GLU A1060      12.175  13.358  15.414  1.00 29.16           O
ATOM    460  OE2  GLU A1060      12.547  15.522  15.437  1.00 27.98           O
ATOM    461  C    GLU A1060      17.333  12.578  14.977  1.00 15.69           C
ATOM    462  O    GLU A1060      17.740  12.730  16.138  1.00 14.40           O
ATOM    463  N    ALA A1061      17.689  11.541  14.219  1.00 14.51           N
ATOM    464  CA   ALA A1061      18.586  10.500  14.727  1.00 14.88           C
ATOM    465  CB   ALA A1061      18.658   9.312  13.730  1.00 14.28           C
ATOM    466  C    ALA A1061      19.998  11.037  15.018  1.00 15.17           C
ATOM    467  O    ALA A1061      20.635  10.622  16.001  1.00 14.05           O
ATOM    468  N    PHE A1062      20.488  11.943  14.167  1.00 14.78           N
ATOM    469  CA   PHE A1062      21.811  12.545  14.365  1.00 16.06           C
ATOM    470  CB   PHE A1062      22.200  13.433  13.161  1.00 16.25           C
ATOM    471  CG   PHE A1062      23.514  14.176  13.341  1.00 17.02           C
ATOM    472  CD1  PHE A1062      23.562  15.384  14.039  1.00 17.84           C
ATOM    473  CD2  PHE A1062      24.707  13.642  12.847  1.00 16.96           C
ATOM    474  CE1  PHE A1062      24.783  16.049  14.247  1.00 17.77           C
ATOM    475  CE2  PHE A1062      25.931  14.297  13.049  1.00 17.84           C
ATOM    476  CZ   PHE A1062      25.964  15.505  13.754  1.00 18.67           C
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ATOM    477  C    PHE A1062      21.830  13.380  15.651  1.00 16.47          C
ATOM    478  O    PHE A1062      22.792  13.326  16.422  1.00 15.43          O
ATOM    479  N    SER A1063      20.760  14.138  15.895  1.00 17.69          N
ATOM    480  CA   SER A1063      20.695  14.979  17.093  1.00 19.00          C
ATOM    481  CB   SER A1063      19.446  15.881  17.067  1.00 20.22          C
ATOM    482  OG   SER A1063      18.276  15.162  17.434  1.00 23.89          O
ATOM    483  C    SER A1063      20.707  14.148  18.383  1.00 19.17          C
ATOM    484  O    SER A1063      21.229  14.602  19.405  1.00 19.65          O
ATOM    485  N    LYS A1064      20.124  12.949  18.353  1.00 18.93          N
ATOM    486  CA   LYS A1064      20.121  12.093  19.545  1.00 19.27          C
ATOM    487  CB   LYS A1064      19.094  10.961  19.418  1.00 19.83          C
ATOM    488  CG   LYS A1064      17.648  11.413  19.471  1.00 21.72          C
ATOM    489  CD   LYS A1064      16.720  10.201  19.456  1.00 23.02          C
ATOM    490  CE   LYS A1064      15.270  10.614  19.240  1.00 24.30          C
ATOM    491  NZ   LYS A1064      14.379   9.425  19.074  1.00 25.01          N
ATOM    492  C    LYS A1064      21.510  11.497  19.770  1.00 19.33          C
ATOM    493  O    LYS A1064      21.920  11.256  20.922  1.00 18.44          O
ATOM    494  N    ALA A1065      22.230  11.254  18.674  1.00 18.91          N
ATOM    495  CA   ALA A1065      23.588  10.716  18.757  1.00 20.48          C
ATOM    496  CB   ALA A1065      24.110  10.348  17.359  1.00 19.55          C
ATOM    497  C    ALA A1065      24.515  11.745  19.417  1.00 22.05          C
ATOM    498  O    ALA A1065      25.486  11.374  20.086  1.00 22.04          O
ATOM    499  N    MET A1066      24.224  13.032  19.224  1.00 23.48          N
ATOM    500  CA   MET A1066      25.027  14.101  19.836  1.00 26.32          C
ATOM    501  CB   MET A1066      24.893  15.409  19.044  1.00 27.55          C
ATOM    502  CG   MET A1066      25.471  15.377  17.634  1.00 29.85          C
ATOM    503  SD   MET A1066      27.227  15.839  17.541  1.00 34.49          S
ATOM    504  CE   MET A1066      27.100  17.585  17.194  1.00 32.80          C
ATOM    505  C    MET A1066      24.554  14.334  21.277  1.00 27.22          C
ATOM    506  O    MET A1066      25.272  14.916  22.093  1.00 27.02          O
ATOM    507  N    GLY A1067      23.335  13.885  21.572  1.00 28.21          N
ATOM    508  CA   GLY A1067      22.770  14.032  22.905  1.00 29.77          C
ATOM    509  C    GLY A1067      22.161  15.395  23.194  1.00 31.30          C
ATOM    510  O    GLY A1067      21.943  15.746  24.356  1.00 30.88          O
ATOM    511  N    THR A1068      21.857  16.153  22.145  1.00 32.65          N
ATOM    512  CA   THR A1068      21.305  17.495  22.309  1.00 34.08          C
ATOM    513  CB   THR A1068      22.128  18.520  21.510  1.00 34.54          C
ATOM    514  OG1  THR A1068      21.950  18.280  20.109  1.00 34.50          O
ATOM    515  CG2  THR A1068      23.613  18.400  21.849  1.00 34.68          C
ATOM    516  C    THR A1068      19.843  17.694  21.911  1.00 35.08          C
ATOM    517  O    THR A1068      19.199  18.637  22.380  1.00 35.34          O
ATOM    518  N    GLY A1069      19.320  16.834  21.046  1.00 35.84          N
ATOM    519  CA   GLY A1069      17.942  16.995  20.611  1.00 37.37          C
ATOM    520  C    GLY A1069      17.855  18.092  19.561  1.00 38.51          C
ATOM    521  O    GLY A1069      18.739  18.946  19.478  1.00 38.69          O
ATOM    522  N    ILE A1070      16.801  18.088  18.752  1.00 39.34          N
ATOM    523  CA   ILE A1070      16.688  19.108  17.722  1.00 40.39          C
ATOM    524  CB   ILE A1070      16.453  18.482  16.329  1.00 40.56          C
ATOM    525  CG2  ILE A1070      15.019  17.992  16.207  1.00 40.43          C
ATOM    526  CG1  ILE A1070      16.784  19.515  15.245  1.00 40.90          C
ATOM    527  CD1  ILE A1070      16.900  18.947  13.841  1.00 40.92          C
ATOM    528  C    ILE A1070      15.616  20.147  18.019  1.00 41.07          C
ATOM    529  O    ILE A1070      14.461  19.826  18.305  1.00 41.30          O
ATOM    530  N    SER A1071      16.046  21.398  17.936  1.00 41.96          N
ATOM    531  CA   SER A1071      15.247  22.588  18.201  1.00 42.87          C
ATOM    532  CB   SER A1071      14.184  22.325  19.271  1.00 43.28          C
ATOM    533  OG   SER A1071      14.779  21.937  20.496  1.00 44.51          O
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ATOM     534  C    SER A1071      16.314  23.521  18.753  1.00 43.09           C
ATOM     535  O    SER A1071      16.254  24.741  18.585  1.00 43.47           O
ATOM     536  N    LYS A1072      17.295  22.914  19.419  1.00 42.86           N
ATOM     537  CA   LYS A1072      18.427  23.637  19.982  1.00 42.57           C
ATOM     538  CB   LYS A1072      19.143  22.768  21.022  1.00 42.32           C
ATOM     539  CG   LYS A1072      18.214  22.218  22.093  0.05 42.40           C
ATOM     540  CD   LYS A1072      17.501  23.339  22.829  0.05 42.37           C
ATOM     541  CE   LYS A1072      16.446  22.789  23.773  0.05 42.36           C
ATOM     542  NZ   LYS A1072      15.708  23.878  24.472  0.05 42.34           N
ATOM     543  C    LYS A1072      19.330  23.904  18.783  1.00 42.27           C
ATOM     544  O    LYS A1072      20.222  24.752  18.814  1.00 42.17           O
ATOM     545  N    LEU A1073      19.065  23.149  17.723  1.00 41.69           N
ATOM     546  CA   LEU A1073      19.773  23.255  16.458  1.00 41.03           C
ATOM     547  CB   LEU A1073      20.879  22.197  16.365  1.00 41.27           C
ATOM     548  CG   LEU A1073      21.578  22.058  15.008  1.00 41.68           C
ATOM     549  CD1  LEU A1073      23.024  21.623  15.193  1.00 41.49           C
ATOM     550  CD2  LEU A1073      20.819  21.060  14.156  1.00 41.59           C
ATOM     551  C    LEU A1073      18.696  23.006  15.408  1.00 39.74           C
ATOM     552  O    LEU A1073      17.999  21.994  15.458  1.00 40.51           O
ATOM     553  N    GLY A1074      18.550  23.937  14.473  1.00 37.90           N
ATOM     554  CA   GLY A1074      17.532  23.795  13.452  1.00 34.96           C
ATOM     555  C    GLY A1074      17.853  22.756  12.399  1.00 32.76           C
ATOM     556  O    GLY A1074      18.968  22.237  12.331  1.00 31.86           O
ATOM     557  N    PHE A1075      16.861  22.447  11.575  1.00 30.76           N
ATOM     558  CA   PHE A1075      17.047  21.474  10.510  1.00 29.13           C
ATOM     559  CB   PHE A1075      15.691  21.061   9.913  1.00 28.59           C
ATOM     560  CG   PHE A1075      14.795  20.317  10.871  1.00 28.14           C
ATOM     561  CD1  PHE A1075      14.129  20.990  11.893  1.00 28.80           C
ATOM     562  CD2  PHE A1075      14.617  18.940  10.747  1.00 27.48           C
ATOM     563  CE1  PHE A1075      13.294  20.301  12.780  1.00 28.53           C
ATOM     564  CE2  PHE A1075      13.787  18.239  11.624  1.00 28.38           C
ATOM     565  CZ   PHE A1075      13.123  18.921  12.644  1.00 28.31           C
ATOM     566  C    PHE A1075      17.940  22.039   9.402  1.00 27.80           C
ATOM     567  O    PHE A1075      18.556  21.280   8.655  1.00 27.44           O
ATOM     568  N    GLN A1076      18.022  23.366   9.301  1.00 26.94           N
ATOM     569  CA   GLN A1076      18.828  24.003   8.250  1.00 26.57           C
ATOM     570  CB   GLN A1076      18.468  25.490   8.111  1.00 27.23           C
ATOM     571  CG   GLN A1076      17.037  25.783   7.655  1.00 28.06           C
ATOM     572  CD   GLN A1076      16.725  25.253   6.261  1.00 28.68           C
ATOM     573  OE1  GLN A1076      17.504  25.432   5.321  1.00 28.59           O
ATOM     574  NE2  GLN A1076      15.571  24.616   6.119  1.00 28.78           N
ATOM     575  C    GLN A1076      20.341  23.880   8.435  1.00 26.18           C
ATOM     576  O    GLN A1076      21.110  24.292   7.565  1.00 25.59           O
ATOM     577  N    ASP A1077      20.774  23.318   9.558  1.00 25.77           N
ATOM     578  CA   ASP A1077      22.204  23.158   9.808  1.00 25.68           C
ATOM     579  CB   ASP A1077      22.498  23.399  11.287  1.00 28.73           C
ATOM     580  CG   ASP A1077      23.952  23.697  11.542  1.00 30.84           C
ATOM     581  OD1  ASP A1077      24.457  24.688  10.969  1.00 33.09           O
ATOM     582  OD2  ASP A1077      24.590  22.947  12.309  1.00 32.53           O
ATOM     583  C    ASP A1077      22.729  21.770   9.393  1.00 24.42           C
ATOM     584  O    ASP A1077      23.928  21.487   9.516  1.00 23.80           O
ATOM     585  N    LEU A1078      21.831  20.919   8.899  1.00 22.23           N
ATOM     586  CA   LEU A1078      22.187  19.559   8.463  1.00 20.68           C
ATOM     587  CB   LEU A1078      21.530  18.525   9.398  1.00 19.99           C
ATOM     588  CG   LEU A1078      21.781  18.646  10.911  1.00 19.68           C
ATOM     589  CD1  LEU A1078      20.853  17.703  11.686  1.00 19.87           C
ATOM     590  CD2  LEU A1078      23.241  18.328  11.221  1.00 20.17           C
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ATOM    591  C   LEU A1078     21.706  19.326   7.022  1.00 20.16          C
ATOM    592  O   LEU A1078     20.708  19.915   6.605  1.00 19.88          O
ATOM    593  N   GLU A1079     22.408  18.474   6.265  1.00 19.89          N
ATOM    594  CA  GLU A1079     22.021  18.165   4.875  1.00 18.83          C
ATOM    595  CB  GLU A1079     22.690  19.153   3.905  1.00 19.73          C
ATOM    596  CG  GLU A1079     22.172  19.085   2.459  1.00 21.03          C
ATOM    597  CD  GLU A1079     22.914  20.028   1.510  1.00 22.47          C
ATOM    598  OE1 GLU A1079     24.127  19.815   1.271  1.00 22.27          O
ATOM    599  OE2 GLU A1079     22.279  20.982   1.002  1.00 23.12          O
ATOM    600  C   GLU A1079     22.385  16.716   4.484  1.00 18.06          C
ATOM    601  O   GLU A1079     23.492  16.242   4.778  1.00 17.37          O
ATOM    602  N   VAL A1080     21.451  16.023   3.826  1.00 16.74          N
ATOM    603  CA  VAL A1080     21.644  14.626   3.396  1.00 16.37          C
ATOM    604  CB  VAL A1080     20.633  13.675   4.138  1.00 16.24          C
ATOM    605  CG1 VAL A1080     20.859  12.217   3.738  1.00 16.31          C
ATOM    606  CG2 VAL A1080     20.776  13.832   5.654  1.00 16.73          C
ATOM    607  C   VAL A1080     21.454  14.439   1.868  1.00 16.11          C
ATOM    608  O   VAL A1080     20.356  14.635   1.357  1.00 16.59          O
ATOM    609  N   LEU A1081     22.519  14.060   1.155  1.00 16.23          N
ATOM    610  CA  LEU A1081     22.473  13.830  -0.303  1.00 16.11          C
ATOM    611  CB  LEU A1081     23.488  14.749  -1.017  1.00 16.03          C
ATOM    612  CG  LEU A1081     23.400  16.265  -0.767  1.00 17.13          C
ATOM    613  CD1 LEU A1081     24.565  16.983  -1.464  1.00 16.85          C
ATOM    614  CD2 LEU A1081     22.064  16.798  -1.283  1.00 17.61          C
ATOM    615  C   LEU A1081     22.790  12.350  -0.624  1.00 16.47          C
ATOM    616  O   LEU A1081     22.881  11.530   0.285  1.00 15.85          O
ATOM    617  N   ASN A1082     22.954  12.004  -1.906  1.00 17.23          N
ATOM    618  CA  ASN A1082     23.266  10.615  -2.299  1.00 18.16          C
ATOM    619  CB  ASN A1082     22.169  10.064  -3.227  1.00 19.47          C
ATOM    620  CG  ASN A1082     20.853   9.800  -2.496  1.00 20.37          C
ATOM    621  OD1 ASN A1082     20.701   8.793  -1.806  1.00 23.12          O
ATOM    622  ND2 ASN A1082     19.908  10.709  -2.637  1.00 21.16          N
ATOM    623  C   ASN A1082     24.633  10.540  -3.004  1.00 18.65          C
ATOM    624  O   ASN A1082     24.894  11.311  -3.936  1.00 18.53          O
ATOM    625  N   ASN A1083     25.501   9.621  -2.567  1.00 18.47          N
ATOM    626  CA  ASN A1083     26.840   9.496  -3.160  1.00 19.58          C
ATOM    627  CB  ASN A1083     27.823   8.831  -2.172  1.00 19.14          C
ATOM    628  CG  ASN A1083     27.525   7.354  -1.898  1.00 19.47          C
ATOM    629  OD1 ASN A1083     28.000   6.806  -0.896  1.00 21.52          O
ATOM    630  ND2 ASN A1083     26.774   6.705  -2.778  1.00 18.08          N
ATOM    631  C   ASN A1083     26.879   8.801  -4.522  1.00 21.02          C
ATOM    632  O   ASN A1083     25.835   8.408  -5.053  1.00 20.46          O
ATOM    633  N   GLU A1084     28.073   8.655  -5.095  1.00 22.56          N
ATOM    634  CA  GLU A1084     28.183   8.048  -6.422  1.00 25.48          C
ATOM    635  CB  GLU A1084     29.606   8.243  -6.993  1.00 26.01          C
ATOM    636  CG  GLU A1084     30.704   7.346  -6.452  1.00 27.48          C
ATOM    637  CD  GLU A1084     32.055   7.621  -7.127  1.00 28.81          C
ATOM    638  OE1 GLU A1084     32.087   7.807  -8.365  1.00 28.44          O
ATOM    639  OE2 GLU A1084     33.085   7.644  -6.424  1.00 29.66          O
ATOM    640  C   GLU A1084     27.747   6.583  -6.523  1.00 26.10          C
ATOM    641  O   GLU A1084     27.675   6.030  -7.618  1.00 26.96          O
ATOM    642  N   ARG A1085     27.446   5.958  -5.390  1.00 26.87          N
ATOM    643  CA  ARG A1085     26.976   4.571  -5.381  1.00 27.01          C
ATOM    644  CB  ARG A1085     27.697   3.761  -4.302  1.00 29.89          C
ATOM    645  CG  ARG A1085     29.210   3.670  -4.479  1.00 33.27          C
ATOM    646  CD  ARG A1085     29.603   2.687  -5.570  1.00 35.91          C
ATOM    647  NE  ARG A1085     31.041   2.724  -5.834  1.00 37.82          N
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ATOM    648  CZ  ARG A1085      31.696   1.814  -6.549  1.00 39.02           C
ATOM    649  NH1 ARG A1085      33.005   1.929  -6.739  1.00 39.21           N
ATOM    650  NH2 ARG A1085      31.043   0.782  -7.067  1.00 39.98           N
ATOM    651  C   ARG A1085      25.467   4.573  -5.097  1.00 26.06           C
ATOM    652  O   ARG A1085      24.830   3.515  -5.033  1.00 26.15           O
ATOM    653  N   GLY A1086      24.911   5.768  -4.907  1.00 24.38           N
ATOM    654  CA  GLY A1086      23.485   5.910  -4.649  1.00 22.84           C
ATOM    655  C   GLY A1086      22.989   5.874  -3.207  1.00 21.70           C
ATOM    656  O   GLY A1086      21.780   5.910  -2.980  1.00 21.52           O
ATOM    657  N   ALA A1087      23.896   5.813  -2.234  1.00 20.27           N
ATOM    658  CA  ALA A1087      23.506   5.757  -0.819  1.00 19.12           C
ATOM    659  CB  ALA A1087      24.452   4.825  -0.065  1.00 19.31           C
ATOM    660  C   ALA A1087      23.468   7.126  -0.123  1.00 18.28           C
ATOM    661  O   ALA A1087      24.293   8.001  -0.400  1.00 17.46           O
ATOM    662  N   PRO A1088      22.511   7.322   0.807  1.00 17.16           N
ATOM    663  CD  PRO A1088      21.424   6.400   1.186  1.00 17.79           C
ATOM    664  CA  PRO A1088      22.398   8.598   1.529  1.00 16.21           C
ATOM    665  CB  PRO A1088      21.053   8.469   2.263  1.00 16.47           C
ATOM    666  CG  PRO A1088      20.938   6.995   2.507  1.00 17.39           C
ATOM    667  C   PRO A1088      23.579   8.828   2.481  1.00 15.55           C
ATOM    668  O   PRO A1088      24.084   7.876   3.082  1.00 14.47           O
ATOM    669  N   TYR A1089      24.018  10.085   2.597  1.00 14.68           N
ATOM    670  CA  TYR A1089      25.148  10.453   3.466  1.00 15.17           C
ATOM    671  CB  TYR A1089      26.478  10.205   2.728  1.00 15.96           C
ATOM    672  CG  TYR A1089      26.834  11.280   1.707  1.00 17.14           C
ATOM    673  CD1 TYR A1089      27.815  12.240   1.980  1.00 17.14           C
ATOM    674  CE1 TYR A1089      28.136  13.243   1.042  1.00 17.71           C
ATOM    675  CD2 TYR A1089      26.180  11.345   0.476  1.00 17.70           C
ATOM    676  CE2 TYR A1089      26.490  12.342  -0.470  1.00 18.23           C
ATOM    677  CZ  TYR A1089      27.467  13.286  -0.180  1.00 18.79           C
ATOM    678  OH  TYR A1089      27.769  14.272  -1.110  1.00 18.83           O
ATOM    679  C   TYR A1089      25.068  11.931   3.886  1.00 15.23           C
ATOM    680  O   TYR A1089      24.480  12.749   3.172  1.00 14.55           O
ATOM    681  N   PHE A1090      25.664  12.276   5.030  1.00 15.03           N
ATOM    682  CA  PHE A1090      25.646  13.668   5.502  1.00 16.07           C
ATOM    683  CB  PHE A1090      25.891  13.743   7.023  1.00 15.87           C
ATOM    684  CG  PHE A1090      24.662  13.469   7.864  1.00 15.54           C
ATOM    685  CD1 PHE A1090      24.359  12.176   8.287  1.00 14.81           C
ATOM    686  CD2 PHE A1090      23.798  14.512   8.213  1.00 15.28           C
ATOM    687  CE1 PHE A1090      23.207  11.920   9.048  1.00 15.40           C
ATOM    688  CE2 PHE A1090      22.643  14.272   8.973  1.00 16.17           C
ATOM    689  CZ  PHE A1090      22.347  12.971   9.390  1.00 15.25           C
ATOM    690  C   PHE A1090      26.694  14.553   4.800  1.00 16.94           C
ATOM    691  O   PHE A1090      27.898  14.378   5.005  1.00 15.67           O
ATOM    692  N   SER A1091      26.233  15.499   3.983  1.00 18.05           N
ATOM    693  CA  SER A1091      27.135  16.421   3.285  1.00 20.04           C
ATOM    694  CB  SER A1091      26.528  16.864   1.949  1.00 20.26           C
ATOM    695  OG  SER A1091      25.196  17.305   2.106  1.00 21.03           O
ATOM    696  C   SER A1091      27.456  17.653   4.143  1.00 20.79           C
ATOM    697  O   SER A1091      28.445  18.349   3.890  1.00 21.71           O
ATOM    698  N   GLN A1092      26.606  17.930   5.133  1.00 20.94           N
ATOM    699  CA  GLN A1092      26.810  19.049   6.062  1.00 21.39           C
ATOM    700  CB  GLN A1092      25.958  20.265   5.665  1.00 23.27           C
ATOM    701  CG  GLN A1092      26.267  20.898   4.305  1.00 25.76           C
ATOM    702  CD  GLN A1092      27.623  21.589   4.244  1.00 27.71           C
ATOM    703  OE1 GLN A1092      28.044  22.248   5.197  1.00 29.37           O
ATOM    704  NE2 GLN A1092      28.301  21.461   3.106  1.00 28.25           N
ATOM    705  C   GLN A1092      26.416  18.619   7.489  1.00 20.95           C
ATOM    706  O   GLN A1092      25.340  18.064   7.689  1.00 20.12           O
ATOM    707  N   ALA A1093      27.290  18.868   8.466  1.00 20.33           N
ATOM    708  CA  ALA A1093      27.030  18.533   9.874  1.00 20.84           C
ATOM    709  CB  ALA A1093      26.874  17.013  10.046  1.00 20.16           C
ATOM    710  C   ALA A1093      28.179  19.041  10.757  1.00 21.48           C
ATOM    711  O   ALA A1093      29.319  19.128  10.304  1.00 21.44           O
ATOM    712  N   PRO A1094      27.890  19.389  12.027  1.00 22.28           N
ATOM    713  CD  PRO A1094      26.539  19.598  12.585  1.00 22.57           C
ATOM    714  CA  PRO A1094      28.921  19.887  12.954  1.00 22.63           C
ATOM    715  CB  PRO A1094      28.125  20.803  13.876  1.00 22.88           C
ATOM    716  CG  PRO A1094      26.828  20.043  14.020  1.00 23.37           C
ATOM    717  C   PRO A1094      29.678  18.791  13.731  1.00 23.05           C
ATOM    718  O   PRO A1094      29.571  18.700  14.959  1.00 23.97           O
ATOM    719  N   PHE A1095      30.446  17.976  13.009  1.00 22.89           N
ATOM    720  CA  PHE A1095      31.232  16.883  13.590  1.00 22.99           C
ATOM    721  CB  PHE A1095      30.341  15.639  13.767  1.00 22.67           C
ATOM    722  CG  PHE A1095      31.067  14.436  14.307  1.00 22.55           C
ATOM    723  CD1 PHE A1095      31.374  13.360  13.474  1.00 22.34           C
ATOM    724  CD2 PHE A1095      31.462  14.385  15.641  1.00 22.13           C
ATOM    725  CE1 PHE A1095      32.068  12.250  13.963  1.00 22.27           C
ATOM    726  CE2 PHE A1095      32.156  13.281  16.143  1.00 22.71           C
ATOM    727  CZ  PHE A1095      32.461  12.209  15.300  1.00 22.51           C
ATOM    728  C   PHE A1095      32.406  16.592  12.639  1.00 23.22           C
ATOM    729  O   PHE A1095      32.221  16.574  11.426  1.00 23.38           O
ATOM    730  N   SER A1096      33.602  16.353  13.183  1.00 23.37           N
ATOM    731  CA  SER A1096      34.792  16.122  12.347  1.00 23.62           C
ATOM    732  CB  SER A1096      35.993  16.858  12.955  1.00 24.11           C
ATOM    733  OG  SER A1096      36.331  16.317  14.223  1.00 26.37           O
ATOM    734  C   SER A1096      35.233  14.691  12.000  1.00 23.23           C
ATOM    735  O   SER A1096      36.094  14.510  11.125  1.00 22.88           O
ATOM    736  N   GLY A1097      34.670  13.686  12.669  1.00 22.73           N
ATOM    737  CA  GLY A1097      35.043  12.304  12.391  1.00 21.96           C
ATOM    738  C   GLY A1097      34.138  11.589  11.393  1.00 21.41           C
ATOM    739  O   GLY A1097      33.518  12.232  10.555  1.00 21.73           O
ATOM    740  N   LYS A1098      34.066  10.259  11.479  1.00 20.96           N
ATOM    741  CA  LYS A1098      33.228   9.456  10.578  1.00 20.77           C
ATOM    742  CB  LYS A1098      33.822   8.052  10.409  1.00 22.35           C
ATOM    743  CG  LYS A1098      35.205   8.017   9.774  1.00 25.18           C
ATOM    744  CD  LYS A1098      35.630   6.587   9.449  1.00 26.26           C
ATOM    745  CE  LYS A1098      36.996   6.553   8.772  1.00 28.39           C
ATOM    746  NZ  LYS A1098      37.332   5.194   8.258  1.00 28.94           N
ATOM    747  C   LYS A1098      31.770   9.313  11.046  1.00 19.74           C
ATOM    748  O   LYS A1098      31.517   9.064  12.224  1.00 19.90           O
ATOM    749  N   ILE A1099      30.826   9.461  10.113  1.00 18.27           N
ATOM    750  CA  ILE A1099      29.393   9.340  10.400  1.00 17.38           C
ATOM    751  CB  ILE A1099      28.622  10.638   9.997  1.00 17.39           C
ATOM    752  CG2 ILE A1099      27.124  10.465  10.284  1.00 16.62           C
ATOM    753  CG1 ILE A1099      29.171  11.849  10.761  1.00 15.42           C
ATOM    754  CD1 ILE A1099      28.790  13.196  10.165  1.00 15.80           C
ATOM    755  C   ILE A1099      28.777   8.164   9.607  1.00 17.23           C
ATOM    756  O   ILE A1099      28.697   8.226   8.381  1.00 18.55           O
ATOM    757  N   TRP A1100      28.356   7.102  10.298  1.00 16.06           N
ATOM    758  CA  TRP A1100      27.733   5.939   9.641  1.00 15.73           C
ATOM    759  CB  TRP A1100      28.163   4.638  10.347  1.00 15.81           C
ATOM    760  CG  TRP A1100      29.665   4.374  10.328  1.00 16.55           C
ATOM    761  CD2 TRP A1100      30.415   3.750   9.274  1.00 16.48           C
ATOM    762  CE2 TRP A1100      31.774   3.736   9.676  1.00 17.61           C
ATOM    763  CE3 TRP A1100      30.071   3.199   8.030  1.00 17.03           C
ATOM    764  CD1 TRP A1100      30.575   4.704  11.300  1.00 17.00           C
ATOM    765  NE1 TRP A1100      31.844   4.322  10.916  1.00 16.91           N
ATOM    766  CZ2 TRP A1100      32.792   3.191   8.873  1.00 17.99           C
ATOM    767  CZ3 TRP A1100      31.083   2.654   7.230  1.00 18.05           C
ATOM    768  CH2 TRP A1100      32.430   2.656   7.659  1.00 17.40           C
ATOM    769  C   TRP A1100      26.190   6.079   9.705  1.00 15.39           C
ATOM    770  O   TRP A1100      25.638   6.160  10.801  1.00 15.11           O
ATOM    771  N   LEU A1101      25.517   6.100   8.545  1.00 14.54           N
ATOM    772  CA  LEU A1101      24.045   6.260   8.448  1.00 14.10           C
ATOM    773  CB  LEU A1101      23.705   7.658   7.883  1.00 14.83           C
ATOM    774  CG  LEU A1101      22.267   7.893   7.366  1.00 15.12           C
ATOM    775  CD1 LEU A1101      21.330   8.116   8.541  1.00 15.77           C
ATOM    776  CD2 LEU A1101      22.216   9.105   6.427  1.00 15.58           C
ATOM    777  C   LEU A1101      23.318   5.214   7.576  1.00 13.98           C
ATOM    778  O   LEU A1101      23.847   4.789   6.537  1.00 13.24           O
ATOM    779  N   SER A1102      22.109   4.808   7.996  1.00 13.49           N
ATOM    780  CA  SER A1102      21.278   3.857   7.226  1.00 14.16           C
ATOM    781  CB  SER A1102      21.525   2.411   7.683  1.00 14.32           C
ATOM    782  OG  SER A1102      20.947   1.471   6.781  1.00 14.30           O
ATOM    783  C   SER A1102      19.777   4.190   7.363  1.00 14.45           C
ATOM    784  O   SER A1102      19.311   4.519   8.464  1.00 13.54           O
ATOM    785  N   ILE A1103      19.029   4.089   6.254  1.00 14.69           N
ATOM    786  CA  ILE A1103      17.575   4.387   6.231  1.00 15.31           C
ATOM    787  CB  ILE A1103      17.282   5.709   5.454  1.00 15.58           C
ATOM    788  CG2 ILE A1103      15.783   6.027   5.508  1.00 15.76           C
ATOM    789  CG1 ILE A1103      18.085   6.875   6.041  1.00 15.76           C
ATOM    790  CD1 ILE A1103      17.838   8.216   5.317  1.00 17.30           C
ATOM    791  C   ILE A1103      16.766   3.263   5.541  1.00 15.22           C
ATOM    792  O   ILE A1103      17.249   2.668   4.575  1.00 16.46           O
ATOM    793  N   SER A1104      15.550   2.977   6.023  1.00 15.94           N
ATOM    794  CA  SER A1104      14.686   1.926   5.429  1.00 17.08           C
ATOM    795  CB  SER A1104      14.993   0.564   6.085  1.00 17.67           C
ATOM    796  OG  SER A1104      14.251  -0.486   5.476  1.00 17.18           O
ATOM    797  C   SER A1104      13.174   2.248   5.574  1.00 17.46           C
ATOM    798  O   SER A1104      12.784   2.982   6.483  1.00 16.57           O
ATOM    799  N   HIS A1105      12.323   1.699   4.698  1.00 18.34           N
ATOM    800  CA  HIS A1105      10.877   1.989   4.776  1.00 19.13           C
ATOM    801  CB  HIS A1105      10.572   3.300   4.041  1.00 20.61           C
ATOM    802  CG  HIS A1105      10.702   3.188   2.551  1.00 21.51           C
ATOM    803  CD2 HIS A1105       9.799   2.840   1.601  1.00 22.68           C
ATOM    804  ND1 HIS A1105      11.906   3.333   1.896  1.00 23.14           N
ATOM    805  CE1 HIS A1105      11.742   3.075   0.610  1.00 23.36           C
ATOM    806  NE2 HIS A1105      10.473   2.772   0.405  1.00 22.97           N
ATOM    807  C   HIS A1105       9.918   0.933   4.192  1.00 19.69           C
ATOM    808  O   HIS A1105      10.324   0.073   3.405  1.00 19.77           O
ATOM    809  N   THR A1106       8.640   1.034   4.577  1.00 20.07           N
ATOM    810  CA  THR A1106       7.564   0.171   4.056  1.00 20.65           C
ATOM    811  CB  THR A1106       6.941  -0.769   5.131  1.00 20.02           C
ATOM    812  OG1 THR A1106       6.198   0.004   6.085  1.00 19.30           O
ATOM    813  CG2 THR A1106       8.029  -1.578   5.852  1.00 19.90           C
ATOM    814  C   THR A1106       6.470   1.143   3.587  1.00 22.48           C
ATOM    815  O   THR A1106       6.720   2.347   3.476  1.00 21.87           O
ATOM    816  N   ASP A1107       5.262   0.652   3.315  1.00 23.59           N
ATOM    817  CA  ASP A1107       4.214   1.569   2.875  1.00 25.20           C
ATOM    818  CB  ASP A1107       3.146   0.831   2.052  1.00 27.87           C
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ATOM    819  CG  ASP A1107       2.302  -0.116   2.886  1.00 29.94           C
ATOM    820  OD1 ASP A1107       1.331  -0.672   2.332  1.00 32.47           O
ATOM    821  OD2 ASP A1107       2.601  -0.314   4.086  1.00 32.30           O
ATOM    822  C   ASP A1107       3.549   2.322   4.027  1.00 25.08           C
ATOM    823  O   ASP A1107       2.673   3.156   3.791  1.00 25.52           O
ATOM    824  N   GLN A1108       3.965   2.042   5.264  1.00 24.18           N
ATOM    825  CA  GLN A1108       3.380   2.703   6.435  1.00 23.78           C
ATOM    826  CB  GLN A1108       2.533   1.715   7.251  1.00 25.19           C
ATOM    827  CG  GLN A1108       1.283   1.211   6.550  1.00 28.60           C
ATOM    828  CD  GLN A1108       0.375   0.426   7.479  1.00 30.45           C
ATOM    829  OE1 GLN A1108       0.768  -0.606   8.026  1.00 31.65           O
ATOM    830  NE2 GLN A1108      -0.847   0.918   7.670  1.00 31.23           N
ATOM    831  C   GLN A1108       4.361   3.391   7.390  1.00 22.77           C
ATOM    832  O   GLN A1108       3.966   4.334   8.081  1.00 22.34           O
ATOM    833  N   PHE A1109       5.616   2.926   7.441  1.00 21.34           N
ATOM    834  CA  PHE A1109       6.633   3.513   8.342  1.00 20.67           C
ATOM    835  CB  PHE A1109       6.888   2.605   9.567  1.00 21.50           C
ATOM    836  CG  PHE A1109       5.654   2.213  10.328  1.00 22.53           C
ATOM    837  CD1 PHE A1109       4.947   1.059   9.989  1.00 23.72           C
ATOM    838  CD2 PHE A1109       5.212   2.978  11.403  1.00 23.05           C
ATOM    839  CE1 PHE A1109       3.816   0.673  10.715  1.00 24.14           C
ATOM    840  CE2 PHE A1109       4.082   2.601  12.135  1.00 24.05           C
ATOM    841  CZ  PHE A1109       3.383   1.445  11.789  1.00 23.64           C
ATOM    842  C   PHE A1109       8.015   3.755   7.705  1.00 19.29           C
ATOM    843  O   PHE A1109       8.333   3.199   6.654  1.00 19.32           O
ATOM    844  N   VAL A1110       8.830   4.582   8.368  1.00 18.27           N
ATOM    845  CA  VAL A1110      10.218   4.864   7.955  1.00 16.90           C
ATOM    846  CB  VAL A1110      10.368   6.279   7.299  1.00 17.79           C
ATOM    847  CG1 VAL A1110      10.126   7.377   8.325  1.00 17.09           C
ATOM    848  CG2 VAL A1110      11.754   6.428   6.681  1.00 17.98           C
ATOM    849  C   VAL A1110      11.100   4.796   9.224  1.00 16.47           C
ATOM    850  O   VAL A1110      10.655   5.214  10.300  1.00 15.21           O
ATOM    851  N   THR A1111      12.323   4.260   9.097  1.00 15.44           N
ATOM    852  CA  THR A1111      13.271   4.126  10.225  1.00 16.10           C
ATOM    853  CB  THR A1111      13.369   2.646  10.736  1.00 16.89           C
ATOM    854  OG1 THR A1111      13.775   1.775   9.667  1.00 18.14           O
ATOM    855  CG2 THR A1111      12.038   2.180  11.274  1.00 18.11           C
ATOM    856  C   THR A1111      14.692   4.582   9.860  1.00 15.27           C
ATOM    857  O   THR A1111      15.082   4.502   8.690  1.00 14.78           O
ATOM    858  N   ALA A1112      15.462   5.041  10.858  1.00 14.23           N
ATOM    859  CA  ALA A1112      16.845   5.505  10.639  1.00 13.59           C
ATOM    860  CB  ALA A1112      16.855   7.001  10.293  1.00 12.71           C
ATOM    861  C   ALA A1112      17.764   5.255  11.843  1.00 12.99           C
ATOM    862  O   ALA A1112      17.310   5.303  12.993  1.00 12.81           O
ATOM    863  N   SER A1113      19.055   5.032  11.570  1.00 12.47           N
ATOM    864  CA  SER A1113      20.064   4.761  12.610  1.00 13.04           C
ATOM    865  CB  SER A1113      20.256   3.238  12.736  1.00 13.53           C
ATOM    866  OG  SER A1113      21.244   2.893  13.698  1.00 13.09           O
ATOM    867  C   SER A1113      21.427   5.444  12.318  1.00 13.78           C
ATOM    868  O   SER A1113      21.901   5.419  11.180  1.00 13.46           O
ATOM    869  N   VAL A1114      22.048   6.039  13.348  1.00 13.44           N
ATOM    870  CA  VAL A1114      23.349   6.735  13.208  1.00 12.85           C
ATOM    871  CB  VAL A1114      23.151   8.288  13.286  1.00 12.88           C
ATOM    872  CG1 VAL A1114      24.496   9.005  13.384  1.00 12.82           C
ATOM    873  CG2 VAL A1114      22.384   8.794  12.056  1.00 13.36           C
ATOM    874  C   VAL A1114      24.393   6.328  14.278  1.00 12.70           C
ATOM    875  O   VAL A1114      24.045   6.140  15.444  1.00 12.48           O
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ATOM    876  N   ILE A1115      25.662   6.183  13.873  1.00 13.61           N
ATOM    877  CA  ILE A1115      26.765   5.846  14.800  1.00 13.97           C
ATOM    878  CB  ILE A1115      27.291   4.399  14.621  1.00 14.70           C
ATOM    879  CG2 ILE A1115      28.393   4.124  15.653  1.00 15.55           C
ATOM    880  CG1 ILE A1115      26.163   3.377  14.800  1.00 14.56           C
ATOM    881  CD1 ILE A1115      26.580   1.948  14.433  1.00 14.04           C
ATOM    882  C   ILE A1115      27.940   6.786  14.502  1.00 15.39           C
ATOM    883  O   ILE A1115      28.372   6.879  13.348  1.00 14.30           O
ATOM    884  N   LEU A1116      28.456   7.465  15.537  1.00 15.93           N
ATOM    885  CA  LEU A1116      29.574   8.412  15.397  1.00 16.40           C
ATOM    886  CB  LEU A1116      29.300   9.680  16.235  1.00 16.45           C
ATOM    887  CG  LEU A1116      27.972  10.439  16.051  1.00 15.86           C
ATOM    888  CD1 LEU A1116      27.935  11.642  16.994  1.00 16.47           C
ATOM    889  CD2 LEU A1116      27.816  10.888  14.601  1.00 16.74           C
ATOM    890  C   LEU A1116      30.906   7.778  15.839  1.00 17.18           C
ATOM    891  O   LEU A1116      30.973   7.125  16.880  1.00 15.82           O
ATOM    892  N   GLU A1117      31.970   8.002  15.064  1.00 18.58           N
ATOM    893  CA  GLU A1117      33.278   7.414  15.362  1.00 21.21           C
ATOM    894  CB  GLU A1117      33.404   6.068  14.615  1.00 21.29           C
ATOM    895  CG  GLU A1117      34.793   5.403  14.659  1.00 21.49           C
ATOM    896  CD  GLU A1117      34.930   4.238  13.675  1.00 21.22           C
ATOM    897  OE1 GLU A1117      34.538   4.390  12.500  1.00 20.57           O
ATOM    898  OE2 GLU A1117      35.446   3.166  14.064  1.00 22.68           O
ATOM    899  C   GLU A1117      34.487   8.290  15.001  1.00 23.59           C
ATOM    900  O   GLU A1117      34.440   9.108  14.083  1.00 22.02           O
ATOM    901  N   GLU A1118      35.576   8.115  15.740  1.00 27.34           N
ATOM    902  CA  GLU A1118      36.801   8.839  15.429  1.00 31.25           C
ATOM    903  CB  GLU A1118      36.859  10.184  16.157  1.00 33.00           C
ATOM    904  CG  GLU A1118      36.747  10.131  17.651  1.00 35.45           C
ATOM    905  CD  GLU A1118      37.042  11.480  18.269  1.00 37.44           C
ATOM    906  OE1 GLU A1118      36.389  12.470  17.874  1.00 38.60           O
ATOM    907  OE2 GLU A1118      37.932  11.551  19.145  1.00 39.01           O
ATOM    908  C   GLU A1118      38.005   7.964  15.764  1.00 33.04           C
ATOM    909  O   GLU A1118      38.074   7.358  16.835  1.00 33.37           O
ATOM    910  N   ASN A1119      38.928   7.875  14.809  1.00 34.80           N
ATOM    911  CA  ASN A1119      40.132   7.063  14.945  1.00 36.61           C
ATOM    912  CB  ASN A1119      40.203   6.015  13.823  1.00 37.32           C
ATOM    913  CG  ASN A1119      38.862   5.356  13.537  1.00 38.38           C
ATOM    914  OD1 ASN A1119      38.258   4.731  14.409  1.00 39.30           O
ATOM    915  ND2 ASN A1119      38.393   5.492  12.302  1.00 38.79           N
ATOM    916  C   ASN A1119      41.354   7.972  14.845  1.00 37.29           C
ATOM    917  O   ASN A1119      42.132   7.795  13.885  1.00 37.98           O
ATOM    918  OXT ASN A1119      41.513   8.857  15.710  1.00 38.37           O
TER     919      ASN A1119
ATOM    920  CB  MET B2003      37.510  -3.957  21.175  1.00 28.67           C
ATOM    921  CG  MET B2003      37.230  -5.443  21.092  1.00 31.61           C
ATOM    922  SD  MET B2003      38.381  -6.420  22.089  1.00 36.00           S
ATOM    923  CE  MET B2003      37.478  -6.538  23.632  1.00 34.64           C
ATOM    924  C   MET B2003      35.111  -3.318  20.851  1.00 24.52           C
ATOM    925  O   MET B2003      34.821  -3.223  22.044  1.00 23.78           O
ATOM    926  N   MET B2003      36.911  -1.645  20.536  1.00 26.75           N
ATOM    927  CA  MET B2003      36.543  -3.080  20.373  1.00 26.43           C
ATOM    928  N   ILE B2004      34.220  -3.611  19.907  1.00 23.33           N
ATOM    929  CA  ILE B2004      32.814  -3.877  20.214  1.00 21.77           C
ATOM    930  CB  ILE B2004      31.948  -3.818  18.923  1.00 22.25           C
ATOM    931  CG2 ILE B2004      30.528  -4.317  19.214  1.00 21.40           C
ATOM    932  CG1 ILE B2004      31.936  -2.387  18.370  1.00 22.04           C
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ATOM    933  CD1 ILE B2004      31.248  -2.242  17.013  1.00 23.31           C
ATOM    934  C   ILE B2004      32.688  -5.268  20.837  1.00 21.10           C
ATOM    935  O   ILE B2004      33.423  -6.190  20.463  1.00 21.53           O
ATOM    936  N   VAL B2005      31.774  -5.423  21.793  1.00 19.59           N
ATOM    937  CA  VAL B2005      31.577  -6.725  22.423  1.00 18.29           C
ATOM    938  CB  VAL B2005      32.240  -6.783  23.834  1.00 18.82           C
ATOM    939  CG1 VAL B2005      33.741  -6.518  23.712  1.00 18.55           C
ATOM    940  CG2 VAL B2005      31.596  -5.776  24.778  1.00 19.42           C
ATOM    941  C   VAL B2005      30.108  -7.189  22.520  1.00 17.17           C
ATOM    942  O   VAL B2005      29.827  -8.180  23.193  1.00 16.88           O
ATOM    943  N   GLY B2006      29.190  -6.493  21.838  1.00 15.24           N
ATOM    944  CA  GLY B2006      27.776  -6.881  21.849  1.00 14.41           C
ATOM    945  C   GLY B2006      26.800  -5.899  21.191  1.00 13.76           C
ATOM    946  O   GLY B2006      27.067  -4.703  21.177  1.00 12.82           O
ATOM    947  N   HIS B2007      25.667  -6.388  20.664  1.00 13.79           N
ATOM    948  CA  HIS B2007      24.656  -5.521  20.015  1.00 13.97           C
ATOM    949  CB  HIS B2007      25.046  -5.296  18.534  1.00 13.17           C
ATOM    950  CG  HIS B2007      24.110  -4.400  17.767  1.00 13.29           C
ATOM    951  CD2 HIS B2007      23.648  -4.481  16.494  1.00 13.60           C
ATOM    952  ND1 HIS B2007      23.602  -3.224  18.281  1.00 14.70           N
ATOM    953  CE1 HIS B2007      22.871  -2.619  17.357  1.00 15.43           C
ATOM    954  NE2 HIS B2007      22.884  -3.360  16.262  1.00 13.92           N
ATOM    955  C   HIS B2007      23.227  -6.108  20.104  1.00 13.36           C
ATOM    956  O   HIS B2007      23.024  -7.293  19.817  1.00 13.30           O
ATOM    957  N   GLY B2008      22.249  -5.286  20.504  1.00 13.56           N
ATOM    958  CA  GLY B2008      20.870  -5.758  20.603  1.00 13.42           C
ATOM    959  C   GLY B2008      19.760  -4.724  20.407  1.00 13.33           C
ATOM    960  O   GLY B2008      19.921  -3.566  20.786  1.00 13.08           O
ATOM    961  N   ILE B2009      18.630  -5.143  19.827  1.00 13.48           N
ATOM    962  CA  ILE B2009      17.476  -4.253  19.601  1.00 13.81           C
ATOM    963  CB  ILE B2009      17.327  -3.864  18.086  1.00 14.27           C
ATOM    964  CG2 ILE B2009      18.651  -3.276  17.549  1.00 14.33           C
ATOM    965  CG1 ILE B2009      16.931  -5.091  17.257  1.00 14.49           C
ATOM    966  CD1 ILE B2009      16.666  -4.783  15.777  1.00 15.47           C
ATOM    967  C   ILE B2009      16.155  -4.916  20.066  1.00 14.94           C
ATOM    968  O   ILE B2009      16.090  -6.145  20.190  1.00 14.51           O
ATOM    969  N   ASP B2010      15.115  -4.111  20.318  1.00 15.66           N
ATOM    970  CA  ASP B2010      13.806  -4.644  20.746  1.00 17.47           C
ATOM    971  CB  ASP B2010      13.820  -4.974  22.250  1.00 18.72           C
ATOM    972  CG  ASP B2010      12.474  -5.527  22.757  1.00 19.74           C
ATOM    973  OD1 ASP B2010      11.670  -4.747  23.311  1.00 21.08           O
ATOM    974  OD2 ASP B2010      12.214  -6.740  22.593  1.00 19.62           O
ATOM    975  C   ASP B2010      12.623  -3.709  20.447  1.00 18.58           C
ATOM    976  O   ASP B2010      12.769  -2.483  20.472  1.00 17.47           O
ATOM    977  N   ILE B2011      11.465  -4.304  20.148  1.00 19.97           N
ATOM    978  CA  ILE B2011      10.224  -3.558  19.874  1.00 22.59           C
ATOM    979  CB  ILE B2011       9.666  -3.817  18.459  1.00 23.44           C
ATOM    980  CG2 ILE B2011       8.532  -2.831  18.167  1.00 24.17           C
ATOM    981  CG1 ILE B2011      10.752  -3.688  17.411  1.00 23.83           C
ATOM    982  CD1 ILE B2011      10.368  -4.350  16.110  1.00 24.58           C
ATOM    983  C   ILE B2011       9.134  -4.066  20.833  1.00 23.70           C
ATOM    984  O   ILE B2011       9.039  -5.271  21.078  1.00 23.87           O
ATOM    985  N   GLU B2012       8.305  -3.166  21.359  1.00 24.36           N
ATOM    986  CA  GLU B2012       7.232  -3.569  22.270  1.00 25.44           C
ATOM    987  CB  GLU B2012       7.626  -3.297  23.723  1.00 26.83           C
ATOM    988  CG  GLU B2012       6.659  -3.896  24.741  1.00 29.96           C
ATOM    989  CD  GLU B2012       6.806  -5.408  24.892  1.00 32.18           C
ATOM    990  OE1 GLU B2012       7.094  -6.098  23.888  1.00 33.01           O
ATOM    991  OE2 GLU B2012       6.617  -5.908  26.024  1.00 33.41           O
ATOM    992  C   GLU B2012       5.915  -2.848  21.952  1.00 25.77           C
ATOM    993  O   GLU B2012       5.911  -1.677  21.585  1.00 24.25           O
ATOM    994  N   GLU B2013       4.800  -3.563  22.089  1.00 26.07           N
ATOM    995  CA  GLU B2013       3.483  -2.997  21.806  1.00 26.79           C
ATOM    996  CB  GLU B2013       2.546  -4.097  21.294  1.00 27.06           C
ATOM    997  CG  GLU B2013       3.025  -4.777  20.014  1.00 27.29           C
ATOM    998  CD  GLU B2013       2.147  -5.943  19.607  0.05 27.19           C
ATOM    999  OE1 GLU B2013       0.920  -5.750  19.479  0.05 27.19           O
ATOM   1000  OE2 GLU B2013       2.684  -7.054  19.413  0.05 27.19           O
ATOM   1001  C   GLU B2013       2.895  -2.358  23.061  1.00 27.09           C
ATOM   1002  O   GLU B2013       2.816  -2.998  24.113  1.00 27.20           O
ATOM   1003  N   LEU B2014       2.489  -1.096  22.952  1.00 27.74           N
ATOM   1004  CA  LEU B2014       1.915  -0.383  24.088  1.00 28.99           C
ATOM   1005  CB  LEU B2014       1.448   1.015  23.666  1.00 29.85           C
ATOM   1006  CG  LEU B2014       2.499   2.064  23.293  1.00 30.49           C
ATOM   1007  CD1 LEU B2014       1.802   3.353  22.863  1.00 31.36           C
ATOM   1008  CD2 LEU B2014       3.408   2.332  24.477  1.00 30.66           C
ATOM   1009  C   LEU B2014       0.742  -1.144  24.705  1.00 29.62           C
ATOM   1010  O   LEU B2014       0.614  -1.209  25.924  1.00 28.92           O
ATOM   1011  N   ALA B2015      -0.103  -1.723  23.855  1.00 30.68           N
ATOM   1012  CA  ALA B2015      -1.273  -2.468  24.312  1.00 31.89           C
ATOM   1013  CB  ALA B2015      -2.062  -2.992  23.106  1.00 31.63           C
ATOM   1014  C   ALA B2015      -0.942  -3.624  25.256  1.00 32.68           C
ATOM   1015  O   ALA B2015      -1.705  -3.913  26.180  1.00 32.95           O
ATOM   1016  N   SER B2016       0.192  -4.282  25.026  1.00 32.98           N
ATOM   1017  CA  SER B2016       0.599  -5.409  25.861  1.00 33.69           C
ATOM   1018  CB  SER B2016       1.758  -6.157  25.205  1.00 34.30           C
ATOM   1019  OG  SER B2016       1.360  -6.697  23.955  1.00 36.37           O
ATOM   1020  C   SER B2016       0.993  -4.981  27.271  1.00 33.62           C
ATOM   1021  O   SER B2016       0.707  -5.680  28.242  1.00 33.30           O
ATOM   1022  N   ILE B2017       1.656  -3.835  27.384  1.00 33.85           N
ATOM   1023  CA  ILE B2017       2.056  -3.339  28.694  1.00 34.29           C
ATOM   1024  CB  ILE B2017       2.995  -2.115  28.571  1.00 34.08           C
ATOM   1025  CG2 ILE B2017       3.350  -1.588  29.958  1.00 33.83           C
ATOM   1026  CG1 ILE B2017       4.264  -2.501  27.800  1.00 33.75           C
ATOM   1027  CD1 ILE B2017       5.080  -3.611  28.449  1.00 33.98           C
ATOM   1028  C   ILE B2017       0.802  -2.932  29.474  1.00 35.14           C
ATOM   1029  O   ILE B2017       0.714  -3.143  30.683  1.00 34.67           O
ATOM   1030  N   GLU B2018      -0.172  -2.362  28.770  1.00 36.36           N
ATOM   1031  CA  GLU B2018      -1.414  -1.925  29.402  1.00 37.92           C
ATOM   1032  CB  GLU B2018      -2.292  -1.189  28.386  1.00 38.65           C
ATOM   1033  CG  GLU B2018      -1.548  -0.122  27.599  1.00 40.03           C
ATOM   1034  CD  GLU B2018      -2.462   0.705  26.716  1.00 41.09           C
ATOM   1035  OE1 GLU B2018      -3.463   0.148  26.216  1.00 41.60           O
ATOM   1036  OE2 GLU B2018      -2.172   1.907  26.510  1.00 41.15           O
ATOM   1037  C   GLU B2018      -2.189  -3.093  30.011  1.00 38.32           C
ATOM   1038  O   GLU B2018      -2.697  -2.993  31.129  1.00 39.05           O
ATOM   1039  N   SER B2019      -2.281  -4.198  29.278  1.00 38.71           N
ATOM   1040  CA  SER B2019      -2.989  -5.375  29.771  1.00 39.10           C
ATOM   1041  CB  SER B2019      -2.996  -6.476  28.709  1.00 39.02           C
ATOM   1042  OG  SER B2019      -3.734  -6.082  27.568  1.00 39.39           O
ATOM   1043  C   SER B2019      -2.332  -5.903  31.044  1.00 39.56           C
ATOM   1044  O   SER B2019      -3.013  -6.228  32.016  1.00 39.07           O
ATOM   1045  N   ALA B2020      -1.004  -5.983  31.031  1.00 39.92           N
ATOM   1046  CA  ALA B2020      -0.253  -6.471  32.182  1.00 40.75           C
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ATOM   1047  CB  ALA B2020       1.240  -6.474  31.866  1.00 39.96           C
ATOM   1048  C   ALA B2020      -0.531  -5.614  33.415  1.00 41.51           C
ATOM   1049  O   ALA B2020      -0.584  -6.122  34.535  1.00 41.34           O
ATOM   1050  N   VAL B2021      -0.704  -4.314  33.202  1.00 42.82           N
ATOM   1051  CA  VAL B2021      -0.985  -3.390  34.295  1.00 44.39           C
ATOM   1052  CB  VAL B2021      -0.767  -1.922  33.855  1.00 44.31           C
ATOM   1053  CG1 VAL B2021      -1.303  -0.971  34.913  1.00 44.07           C
ATOM   1054  CG2 VAL B2021       0.718  -1.663  33.627  1.00 44.22           C
ATOM   1055  C   VAL B2021      -2.424  -3.555  34.787  1.00 45.72           C
ATOM   1056  O   VAL B2021      -2.673  -3.604  35.992  1.00 45.74           O
ATOM   1057  N   THR B2022      -3.365  -3.642  33.851  1.00 47.27           N
ATOM   1058  CA  THR B2022      -4.776  -3.801  34.191  1.00 48.73           C
ATOM   1059  CB  THR B2022      -5.661  -3.833  32.919  1.00 49.02           C
ATOM   1060  OG1 THR B2022      -5.482  -2.619  32.177  1.00 49.29           O
ATOM   1061  CG2 THR B2022      -7.134  -3.968  33.293  1.00 49.42           C
ATOM   1062  C   THR B2022      -4.988  -5.093  34.977  1.00 49.61           C
ATOM   1063  O   THR B2022      -5.953  -5.225  35.733  1.00 49.90           O
ATOM   1064  N   ARG B2023      -4.077  -6.043  34.794  1.00 50.61           N
ATOM   1065  CA  ARG B2023      -4.152  -7.325  35.484  1.00 51.35           C
ATOM   1066  CB  ARG B2023      -3.028  -8.245  35.009  1.00 52.09           C
ATOM   1067  CG  ARG B2023      -3.416  -9.710  34.907  1.00 53.02           C
ATOM   1068  CD  ARG B2023      -3.676 -10.103  33.461  1.00 54.10           C
ATOM   1069  NE  ARG B2023      -2.492  -9.895  32.628  1.00 54.73           N
ATOM   1070  CZ  ARG B2023      -2.419 -10.194  31.334  1.00 55.21           C
ATOM   1071  NH1 ARG B2023      -3.465 -10.720  30.710  1.00 55.43           N
ATOM   1072  NH2 ARG B2023      -1.296  -9.967  30.663  1.00 55.24           N
ATOM   1073  C   ARG B2023      -4.025  -7.093  36.989  1.00 51.64           C
ATOM   1074  O   ARG B2023      -4.448  -7.924  37.794  1.00 51.91           O
ATOM   1075  N   HIS B2024      -3.428  -5.960  37.354  1.00 51.80           N
ATOM   1076  CA  HIS B2024      -3.242  -5.575  38.753  1.00 51.59           C
ATOM   1077  CB  HIS B2024      -4.586  -5.645  39.491  1.00 52.56           C
ATOM   1078  CG  HIS B2024      -4.528  -5.165  40.908  1.00 53.50           C
ATOM   1079  CD2 HIS B2024      -4.815  -5.791  42.074  1.00 53.85           C
ATOM   1080  ND1 HIS B2024      -4.142  -3.886  41.245  1.00 53.73           N
ATOM   1081  CE1 HIS B2024      -4.195  -3.743  42.557  1.00 54.11           C
ATOM   1082  NE2 HIS B2024      -4.601  -4.885  43.084  1.00 54.34           N
ATOM   1083  C   HIS B2024      -2.207  -6.427  39.490  1.00 50.92           C
ATOM   1084  O   HIS B2024      -1.802  -6.100  40.607  1.00 51.09           O
ATOM   1085  N   GLU B2025      -1.777  -7.511  38.853  1.00 49.85           N
ATOM   1086  CA  GLU B2025      -0.805  -8.436  39.429  1.00 48.60           C
ATOM   1087  CB  GLU B2025      -0.133  -9.231  38.309  1.00 49.70           C
ATOM   1088  CG  GLU B2025      -1.109  -9.812  37.300  1.00 50.84           C
ATOM   1089  CD  GLU B2025      -0.430 -10.676  36.255  1.00 51.43           C
ATOM   1090  OE1 GLU B2025       0.084 -11.754  36.617  1.00 52.08           O
ATOM   1091  OE2 GLU B2025      -0.408 -10.276  35.073  1.00 51.96           O
ATOM   1092  C   GLU B2025       0.274  -7.788  40.301  1.00 47.18           C
ATOM   1093  O   GLU B2025       0.636  -8.322  41.350  1.00 47.28           O
ATOM   1094  N   GLY B2026       0.779  -6.638  39.864  1.00 45.23           N
ATOM   1095  CA  GLY B2026       1.832  -5.953  40.598  1.00 42.17           C
ATOM   1096  C   GLY B2026       3.021  -5.830  39.663  1.00 39.71           C
ATOM   1097  O   GLY B2026       4.185  -5.914  40.066  1.00 39.77           O
ATOM   1098  N   PHE B2027       2.695  -5.632  38.392  1.00 37.19           N
ATOM   1099  CA  PHE B2027       3.667  -5.509  37.315  1.00 34.55           C
ATOM   1100  CB  PHE B2027       2.922  -5.189  36.014  1.00 34.52           C
ATOM   1101  CG  PHE B2027       3.752  -5.355  34.777  1.00 34.13           C
ATOM   1102  CD1 PHE B2027       4.207  -6.613  34.393  1.00 34.08           C
ATOM   1103  CD2 PHE B2027       4.067  -4.258  33.986  1.00 34.08           C
ATOM   1104  CE1 PHE B2027       4.963  -6.776  33.237  1.00 34.11           C
ATOM   1105  CE2 PHE B2027       4.825  -4.409  32.824  1.00 34.27           C
ATOM   1106  CZ  PHE B2027       5.274  -5.670  32.449  1.00 34.06           C
ATOM   1107  C   PHE B2027       4.755  -4.459  37.559  1.00 32.71           C
ATOM   1108  O   PHE B2027       5.933  -4.794  37.676  1.00 31.86           O
ATOM   1109  N   ALA B2028       4.352  -3.192  37.631  1.00 30.82           N
ATOM   1110  CA  ALA B2028       5.284  -2.082  37.831  1.00 29.20           C
ATOM   1111  CB  ALA B2028       4.506  -0.787  38.047  1.00 29.12           C
ATOM   1112  C   ALA B2028       6.290  -2.269  38.966  1.00 28.66           C
ATOM   1113  O   ALA B2028       7.451  -1.884  38.836  1.00 27.76           O
ATOM   1114  N   LYS B2029       5.846  -2.853  40.075  1.00 27.74           N
ATOM   1115  CA  LYS B2029       6.718  -3.065  41.226  1.00 27.62           C
ATOM   1116  CB  LYS B2029       5.899  -3.552  42.423  1.00 27.96           C
ATOM   1117  CG  LYS B2029       5.853  -2.569  43.584  1.00 28.74           C
ATOM   1118  CD  LYS B2029       7.247  -2.299  44.131  0.05 28.50           C
ATOM   1119  CE  LYS B2029       7.204  -1.384  45.343  0.05 28.61           C
ATOM   1120  NZ  LYS B2029       6.454  -1.997  46.474  0.05 28.56           N
ATOM   1121  C   LYS B2029       7.864  -4.042  40.969  1.00 27.09           C
ATOM   1122  O   LYS B2029       8.937  -3.910  41.555  1.00 27.52           O
ATOM   1123  N   ARG B2030       7.642  -5.022  40.099  1.00 25.99           N
ATOM   1124  CA  ARG B2030       8.682  -6.002  39.803  1.00 24.71           C
ATOM   1125  CB  ARG B2030       8.048  -7.358  39.465  1.00 25.36           C
ATOM   1126  CG  ARG B2030       7.303  -7.990  40.631  0.05 25.04           C
ATOM   1127  CD  ARG B2030       6.804  -9.384  40.291  0.05 25.09           C
ATOM   1128  NE  ARG B2030       6.143 -10.015  41.430  0.05 25.02           N
ATOM   1129  CZ  ARG B2030       5.651 -11.249  41.421  0.05 25.00           C
ATOM   1130  NH1 ARG B2030       5.742 -11.996  40.329  0.05 24.97           N
ATOM   1131  NH2 ARG B2030       5.067 -11.739  42.506  0.05 24.97           N
ATOM   1132  C   ARG B2030       9.616  -5.566  38.674  1.00 23.43           C
ATOM   1133  O   ARG B2030      10.763  -6.008  38.613  1.00 22.95           O
ATOM   1134  N   VAL B2031       9.131  -4.688  37.797  1.00 22.08           N
ATOM   1135  CA  VAL B2031       9.924  -4.202  36.665  1.00 20.91           C
ATOM   1136  CB  VAL B2031       8.998  -3.878  35.447  1.00 21.66           C
ATOM   1137  CG1 VAL B2031       9.804  -3.269  34.307  1.00 21.12           C
ATOM   1138  CG2 VAL B2031       8.311  -5.152  34.961  1.00 21.59           C
ATOM   1139  C   VAL B2031      10.806  -2.971  36.946  1.00 20.08           C
ATOM   1140  O   VAL B2031      11.891  -2.840  36.362  1.00 18.87           O
ATOM   1141  N   LEU B2032      10.362  -2.096  37.851  1.00 18.43           N
ATOM   1142  CA  LEU B2032      11.093  -0.857  38.170  1.00 18.33           C
ATOM   1143  CB  LEU B2032      10.123   0.333  38.094  1.00 18.11           C
ATOM   1144  CG  LEU B2032       9.264   0.562  36.836  1.00 17.77           C
ATOM   1145  CD1 LEU B2032       8.288   1.710  37.095  1.00 18.63           C
ATOM   1146  CD2 LEU B2032      10.141   0.893  35.642  1.00 18.26           C
ATOM   1147  C   LEU B2032      11.809  -0.804  39.537  1.00 18.11           C
ATOM   1148  O   LEU B2032      11.313  -1.351  40.528  1.00 17.53           O
ATOM   1149  N   THR B2033      12.964  -0.133  39.589  1.00 17.46           N
ATOM   1150  CA  THR B2033      13.707   0.022  40.848  1.00 17.07           C
ATOM   1151  CB  THR B2033      15.178   0.466  40.617  1.00 17.19           C
ATOM   1152  OG1 THR B2033      15.199   1.760  39.996  1.00 17.05           O
ATOM   1153  CG2 THR B2033      15.919  -0.544  39.733  1.00 15.96           C
ATOM   1154  C   THR B2033      13.010   1.107  41.686  1.00 17.66           C
ATOM   1155  O   THR B2033      12.042   1.720  41.234  1.00 17.87           O
ATOM   1156  N   ALA B2034      13.501   1.355  42.896  1.00 17.54           N
ATOM   1157  CA  ALA B2034      12.886   2.367  43.757  1.00 18.74           C
ATOM   1158  CB  ALA B2034      13.565   2.369  45.123  1.00 18.99           C
ATOM   1159  C   ALA B2034      12.925   3.771  43.145  1.00 18.65           C
ATOM   1160  O   ALA B2034      11.930   4.503  43.188  1.00 18.77           O
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ATOM   1161  N    LEU B2035      14.066   4.148  42.572  1.00 18.26       N
ATOM   1162  CA   LEU B2035      14.216   5.470  41.962  1.00 19.09       C
ATOM   1163  CB   LEU B2035      15.697   5.742  41.665  1.00 20.60       C
ATOM   1164  CG   LEU B2035      16.154   7.182  41.435  1.00 22.12       C
ATOM   1165  CD1  LEU B2035      15.976   8.015  42.714  1.00 23.52       C
ATOM   1166  CD2  LEU B2035      17.618   7.173  41.031  1.00 24.30       C
ATOM   1167  C    LEU B2035      13.383   5.610  40.680  1.00 18.93       C
ATOM   1168  O    LEU B2035      12.801   6.670  40.430  1.00 19.57       O
ATOM   1169  N    GLU B2036      13.333   4.559  39.858  1.00 18.62       N
ATOM   1170  CA   GLU B2036      12.533   4.604  38.626  1.00 18.35       C
ATOM   1171  CB   GLU B2036      12.733   3.327  37.784  1.00 17.51       C
ATOM   1172  CG   GLU B2036      14.085   3.215  37.042  1.00 15.99       C
ATOM   1173  CD   GLU B2036      14.300   1.848  36.391  1.00 16.12       C
ATOM   1174  OE1  GLU B2036      15.007   1.777  35.361  1.00 15.21       O
ATOM   1175  OE2  GLU B2036      13.781   0.836  36.911  1.00 15.16       O
ATOM   1176  C    GLU B2036      11.039   4.744  38.982  1.00 19.23       C
ATOM   1177  O    GLU B2036      10.290   5.440  38.296  1.00 19.60       O
ATOM   1178  N    MET B2037      10.616   4.074  40.051  1.00 19.86       N
ATOM   1179  CA   MET B2037       9.219   4.123  40.501  1.00 21.88       C
ATOM   1180  CB   MET B2037       9.008   3.086  41.615  1.00 22.85       C
ATOM   1181  CG   MET B2037       7.623   3.055  42.236  1.00 25.86       C
ATOM   1182  SD   MET B2037       6.356   2.391  41.143  1.00 28.53       S
ATOM   1183  CE   MET B2037       6.759   0.626  41.201  1.00 27.97       C
ATOM   1184  C    MET B2037       8.834   5.528  41.000  1.00 22.03       C
ATOM   1185  O    MET B2037       7.716   6.006  40.772  1.00 22.35       O
ATOM   1186  N    GLU B2038       9.759   6.187  41.687  1.00 22.54       N
ATOM   1187  CA   GLU B2038       9.501   7.528  42.194  1.00 23.34       C
ATOM   1188  CB   GLU B2038      10.663   7.973  43.101  1.00 23.49       C
ATOM   1189  CG   GLU B2038      10.475   7.496  44.550  1.00 24.52       C
ATOM   1190  CD   GLU B2038      11.772   7.284  45.326  1.00 25.50       C
ATOM   1191  OE1  GLU B2038      12.785   7.962  45.036  1.00 25.67       O
ATOM   1192  OE2  GLU B2038      11.765   6.439  46.251  1.00 25.94       O
ATOM   1193  C    GLU B2038       9.252   8.513  41.046  1.00 23.18       C
ATOM   1194  O    GLU B2038       8.512   9.482  41.200  1.00 23.42       O
ATOM   1195  N    ARG B2039       9.854   8.250  39.888  1.00 23.18       N
ATOM   1196  CA   ARG B2039       9.659   9.097  38.713  1.00 23.42       C
ATOM   1197  CB   ARG B2039      10.801   8.888  37.710  1.00 24.21       C
ATOM   1198  CG   ARG B2039      10.566   9.517  36.338  1.00 24.82       C
ATOM   1199  CD   ARG B2039      10.414  11.027  36.415  0.05 24.52       C
ATOM   1200  NE   ARG B2039      10.169  11.609  35.099  0.05 24.58       N
ATOM   1201  CZ   ARG B2039       9.995  12.908  34.873  0.05 24.54       C
ATOM   1202  NH1  ARG B2039       9.776  13.344  33.640  0.05 24.55       N
ATOM   1203  NH2  ARG B2039      10.039  13.771  35.879  0.05 24.55       N
ATOM   1204  C    ARG B2039       8.323   8.738  38.057  1.00 22.97       C
ATOM   1205  O    ARG B2039       7.591   9.614  37.594  1.00 23.62       O
ATOM   1206  N    PHE B2040       8.015   7.443  38.037  1.00 22.59       N
ATOM   1207  CA   PHE B2040       6.777   6.914  37.456  1.00 23.04       C
ATOM   1208  CB   PHE B2040       6.769   5.381  37.598  1.00 23.27       C
ATOM   1209  CG   PHE B2040       5.520   4.705  37.082  1.00 24.49       C
ATOM   1210  CD1  PHE B2040       5.270   4.604  35.716  1.00 24.75       C
ATOM   1211  CD2  PHE B2040       4.611   4.125  37.971  1.00 24.92       C
ATOM   1212  CE1  PHE B2040       4.135   3.930  35.240  1.00 25.22       C
ATOM   1213  CE2  PHE B2040       3.473   3.451  37.509  1.00 24.72       C
ATOM   1214  CZ   PHE B2040       3.236   3.353  36.139  1.00 25.48       C
ATOM   1215  C    PHE B2040       5.529   7.506  38.126  1.00 23.15       C
ATOM   1216  O    PHE B2040       4.558   7.841  37.448  1.00 22.73       O
ATOM   1217  N    THR B2041       5.559   7.636  39.452  1.00 23.63       N
ATOM   1218  CA  THR B2041       4.407   8.165  40.186  1.00 25.06          C
ATOM   1219  CB  THR B2041       4.487   7.819  41.701  1.00 24.62          C
ATOM   1220  OG1 THR B2041       5.710   8.322  42.250  1.00 24.25          O
ATOM   1221  CG2 THR B2041       4.421   6.311  41.910  1.00 24.17          C
ATOM   1222  C   THR B2041       4.156   9.669  40.050  1.00 25.84          C
ATOM   1223  O   THR B2041       3.089  10.155  40.442  1.00 26.22          O
ATOM   1224  N   SER B2042       5.119  10.412  39.508  1.00 27.24          N
ATOM   1225  CA  SER B2042       4.939  11.856  39.346  1.00 28.70          C
ATOM   1226  CB  SER B2042       6.256  12.605  39.605  1.00 29.90          C
ATOM   1227  OG  SER B2042       7.260  12.270  38.658  1.00 31.49          O
ATOM   1228  C   SER B2042       4.404  12.214  37.959  1.00 29.44          C
ATOM   1229  O   SER B2042       4.245  13.392  37.632  1.00 28.96          O
ATOM   1230  N   LEU B2043       4.127  11.192  37.151  1.00 29.93          N
ATOM   1231  CA  LEU B2043       3.598  11.379  35.797  1.00 30.98          C
ATOM   1232  CB  LEU B2043       4.466  10.622  34.779  1.00 30.83          C
ATOM   1233  CG  LEU B2043       5.925  11.061  34.614  1.00 30.66          C
ATOM   1234  CD1 LEU B2043       6.690  10.037  33.778  1.00 31.31          C
ATOM   1235  CD2 LEU B2043       5.970  12.431  33.960  1.00 31.38          C
ATOM   1236  C   LEU B2043       2.160  10.864  35.712  1.00 31.75          C
ATOM   1237  O   LEU B2043       1.711  10.106  36.573  1.00 31.45          O
ATOM   1238  N   LYS B2044       1.440  11.264  34.668  1.00 33.21          N
ATOM   1239  CA  LYS B2044       0.059  10.820  34.497  1.00 34.53          C
ATOM   1240  CB  LYS B2044      -0.904  11.853  35.100  1.00 35.00          C
ATOM   1241  CG  LYS B2044      -2.362  11.415  35.118  0.05 34.86          C
ATOM   1242  CD  LYS B2044      -3.267  12.481  35.714  0.05 34.96          C
ATOM   1243  CE  LYS B2044      -4.718  12.025  35.718  0.05 34.95          C
ATOM   1244  NZ  LYS B2044      -5.625  13.056  36.293  0.05 35.07          N
ATOM   1245  C   LYS B2044      -0.311  10.580  33.035  1.00 35.45          C
ATOM   1246  O   LYS B2044       0.422  10.960  32.121  1.00 35.43          O
ATOM   1247  N   GLY B2045      -1.454   9.934  32.829  1.00 36.33          N
ATOM   1248  CA  GLY B2045      -1.940   9.671  31.488  1.00 37.45          C
ATOM   1249  C   GLY B2045      -1.031   8.869  30.579  1.00 38.02          C
ATOM   1250  O   GLY B2045      -0.215   8.065  31.036  1.00 38.35          O
ATOM   1251  N   ARG B2046      -1.187   9.099  29.279  1.00 38.11          N
ATOM   1252  CA  ARG B2046      -0.414   8.409  28.250  1.00 38.00          C
ATOM   1253  CB  ARG B2046      -0.718   9.026  26.882  1.00 38.22          C
ATOM   1254  CG  ARG B2046      -2.203   9.241  26.635  0.05 38.32          C
ATOM   1255  CD  ARG B2046      -2.469   9.951  25.319  0.05 38.47          C
ATOM   1256  NE  ARG B2046      -2.193   9.103  24.164  0.05 38.58          N
ATOM   1257  CZ  ARG B2046      -2.418   9.462  22.904  0.05 38.64          C
ATOM   1258  NH1 ARG B2046      -2.138   8.626  21.915  0.05 38.67          N
ATOM   1259  NH2 ARG B2046      -2.925  10.657  22.633  0.05 38.67          N
ATOM   1260  C   ARG B2046       1.083   8.472  28.516  1.00 37.79          C
ATOM   1261  O   ARG B2046       1.809   7.514  28.262  1.00 37.64          O
ATOM   1262  N   ARG B2047       1.534   9.611  29.031  1.00 37.35          N
ATOM   1263  CA  ARG B2047       2.945   9.827  29.327  1.00 36.86          C
ATOM   1264  CB  ARG B2047       3.139  11.262  29.824  1.00 38.35          C
ATOM   1265  CG  ARG B2047       4.529  11.834  29.622  1.00 40.01          C
ATOM   1266  CD  ARG B2047       4.591  13.258  30.156  1.00 41.52          C
ATOM   1267  NE  ARG B2047       5.880  13.894  29.903  1.00 43.12          N
ATOM   1268  CZ  ARG B2047       6.276  15.030  30.471  1.00 44.06          C
ATOM   1269  NH1 ARG B2047       7.467  15.539  30.180  1.00 44.67          N
ATOM   1270  NH2 ARG B2047       5.486  15.654  31.336  1.00 44.50          N
ATOM   1271  C   ARG B2047       3.460   8.826  30.368  1.00 35.56          C
ATOM   1272  O   ARG B2047       4.631   8.454  30.354  1.00 34.93          O
ATOM   1273  N   GLN B2048       2.578   8.388  31.263  1.00 34.21          N
ATOM   1274  CA  GLN B2048       2.947   7.433  32.305  1.00 32.54          C
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ATOM   1275  CB  GLN B2048      1.866   7.413  33.396  1.00 33.03      C
ATOM   1276  CG  GLN B2048      2.203   6.564  34.616  1.00 32.53      C
ATOM   1277  CD  GLN B2048      1.203   6.741  35.751  1.00 33.31      C
ATOM   1278  OE1 GLN B2048      0.009   6.499  35.586  1.00 32.97      O
ATOM   1279  NE2 GLN B2048      1.694   7.164  36.914  1.00 33.17      N
ATOM   1280  C   GLN B2048      3.161   6.021  31.740  1.00 31.47      C
ATOM   1281  O   GLN B2048      4.119   5.340  32.106  1.00 31.22      O
ATOM   1282  N   ILE B2049      2.269   5.589  30.852  1.00 29.87      N
ATOM   1283  CA  ILE B2049      2.366   4.266  30.233  1.00 28.47      C
ATOM   1284  CB  ILE B2049      1.087   3.936  29.417  1.00 28.92      C
ATOM   1285  CG2 ILE B2049      1.263   2.627  28.667  1.00 29.21      C
ATOM   1286  CG1 ILE B2049     -0.130   3.858  30.346  1.00 29.32      C
ATOM   1287  CD1 ILE B2049     -0.118   2.675  31.305  1.00 28.99      C
ATOM   1288  C   ILE B2049      3.577   4.191  29.292  1.00 27.84      C
ATOM   1289  O   ILE B2049      4.172   3.127  29.116  1.00 27.30      O
ATOM   1290  N   GLU B2050      3.933   5.321  28.688  1.00 26.72      N
ATOM   1291  CA  GLU B2050      5.073   5.373  27.774  1.00 26.84      C
ATOM   1292  CB  GLU B2050      5.060   6.692  26.985  1.00 27.77      C
ATOM   1293  CG  GLU B2050      6.298   6.973  26.119  1.00 30.05      C
ATOM   1294  CD  GLU B2050      6.456   6.027  24.927  1.00 31.34      C
ATOM   1295  OE1 GLU B2050      5.443   5.718  24.262  1.00 32.49      O
ATOM   1296  OE2 GLU B2050      7.603   5.610  24.643  1.00 31.18      O
ATOM   1297  C   GLU B2050      6.397   5.223  28.520  1.00 25.29      C
ATOM   1298  O   GLU B2050      7.339   4.621  27.994  1.00 24.70      O
ATOM   1299  N   TYR B2051      6.471   5.767  29.737  1.00 23.32      N
ATOM   1300  CA  TYR B2051      7.696   5.675  30.537  1.00 21.39      C
ATOM   1301  CB  TYR B2051      7.576   6.526  31.821  1.00 21.45      C
ATOM   1302  CG  TYR B2051      8.819   6.522  32.712  1.00 20.60      C
ATOM   1303  CD1 TYR B2051      8.974   5.577  33.728  1.00 20.47      C
ATOM   1304  CE1 TYR B2051     10.128   5.547  34.526  1.00 20.26      C
ATOM   1305  CD2 TYR B2051      9.852   7.444  32.512  1.00 20.44      C
ATOM   1306  CE2 TYR B2051     11.012   7.420  33.302  1.00 20.69      C
ATOM   1307  CZ  TYR B2051     11.141   6.469  34.306  1.00 20.69      C
ATOM   1308  OH  TYR B2051     12.277   6.449  35.094  1.00 21.32      O
ATOM   1309  C   TYR B2051      7.978   4.212  30.885  1.00 20.75      C
ATOM   1310  O   TYR B2051      9.085   3.718  30.658  1.00 19.49      O
ATOM   1311  N   LEU B2052      6.968   3.520  31.413  1.00 19.18      N
ATOM   1312  CA  LEU B2052      7.096   2.109  31.788  1.00 18.14      C
ATOM   1313  CB  LEU B2052      5.782   1.616  32.419  1.00 18.69      C
ATOM   1314  CG  LEU B2052      5.668   0.154  32.868  1.00 19.58      C
ATOM   1315  CD1 LEU B2052      6.783  -0.189  33.861  1.00 19.24      C
ATOM   1316  CD2 LEU B2052      4.299  -0.070  33.511  1.00 20.41      C
ATOM   1317  C   LEU B2052      7.476   1.209  30.598  1.00 17.54      C
ATOM   1318  O   LEU B2052      8.347   0.347  30.719  1.00 16.53      O
ATOM   1319  N   ALA B2053      6.828   1.411  29.453  1.00 16.29      N
ATOM   1320  CA  ALA B2053      7.115   0.600  28.262  1.00 16.39      C
ATOM   1321  CB  ALA B2053      6.106   0.926  27.154  1.00 16.13      C
ATOM   1322  C   ALA B2053      8.550   0.794  27.744  1.00 15.79      C
ATOM   1323  O   ALA B2053      9.206  -0.169  27.325  1.00 16.28      O
ATOM   1324  N   GLY B2054      9.034   2.033  27.771  1.00 15.48      N
ATOM   1325  CA  GLY B2054     10.391   2.311  27.316  1.00 15.32      C
ATOM   1326  C   GLY B2054     11.471   1.701  28.201  1.00 16.07      C
ATOM   1327  O   GLY B2054     12.550   1.309  27.716  1.00 14.96      O
ATOM   1328  N   ARG B2055     11.208   1.633  29.506  1.00 15.22      N
ATOM   1329  CA  ARG B2055     12.179   1.040  30.430  1.00 16.35      C
ATOM   1330  CB  ARG B2055     11.790   1.353  31.886  1.00 17.42      C
ATOM   1331  CG  ARG B2055     12.545   2.543  32.514  1.00 19.58      C
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ATOM   1332  CD  ARG B2055      12.545   3.794  31.623  1.00 21.46           C
ATOM   1333  NE  ARG B2055      13.423   4.838  32.153  1.00 21.36           N
ATOM   1334  CZ  ARG B2055      13.695   5.986  31.534  1.00 22.03           C
ATOM   1335  NH1 ARG B2055      13.155   6.256  30.353  1.00 22.33           N
ATOM   1336  NH2 ARG B2055      14.520   6.865  32.094  1.00 21.30           N
ATOM   1337  C   ARG B2055      12.261  -0.479  30.194  1.00 16.15           C
ATOM   1338  O   ARG B2055      13.339  -1.079  30.277  1.00 15.13           O
ATOM   1339  N   TRP B2056      11.119  -1.090  29.884  1.00 16.30           N
ATOM   1340  CA  TRP B2056      11.055  -2.528  29.608  1.00 17.26           C
ATOM   1341  CB  TRP B2056       9.592  -2.966  29.425  1.00 19.31           C
ATOM   1342  CG  TRP B2056       9.393  -4.449  29.444  1.00 22.46           C
ATOM   1343  CD2 TRP B2056       9.458  -5.335  28.325  1.00 24.24           C
ATOM   1344  CE2 TRP B2056       9.234  -6.644  28.813  1.00 25.47           C
ATOM   1345  CE3 TRP B2056       9.684  -5.153  26.954  1.00 25.79           C
ATOM   1346  CD1 TRP B2056       9.139  -5.234  30.540  1.00 23.87           C
ATOM   1347  NE1 TRP B2056       9.041  -6.552  30.167  1.00 24.64           N
ATOM   1348  CZ2 TRP B2056       9.231  -7.763  27.979  1.00 26.38           C
ATOM   1349  CZ3 TRP B2056       9.681  -6.270  26.122  1.00 27.06           C
ATOM   1350  CH2 TRP B2056       9.455  -7.559  26.641  1.00 27.05           C
ATOM   1351  C   TRP B2056      11.843  -2.850  28.327  1.00 16.16           C
ATOM   1352  O   TRP B2056      12.642  -3.794  28.288  1.00 16.26           O
ATOM   1353  N   SER B2057      11.608  -2.053  27.288  1.00 15.01           N
ATOM   1354  CA  SER B2057      12.265  -2.208  25.980  1.00 14.82           C
ATOM   1355  CB  SER B2057      11.678  -1.155  25.017  1.00 15.72           C
ATOM   1356  OG  SER B2057      12.069  -1.352  23.670  1.00 19.47           O
ATOM   1357  C   SER B2057      13.807  -2.052  26.087  1.00 14.21           C
ATOM   1358  O   SER B2057      14.581  -2.816  25.471  1.00 12.39           O
ATOM   1359  N   ALA B2058      14.246  -1.072  26.873  1.00 12.21           N
ATOM   1360  CA  ALA B2058      15.680  -0.810  27.052  1.00 12.92           C
ATOM   1361  CB  ALA B2058      15.878   0.516  27.800  1.00 12.17           C
ATOM   1362  C   ALA B2058      16.398  -1.949  27.801  1.00 12.59           C
ATOM   1363  O   ALA B2058      17.507  -2.354  27.428  1.00 11.75           O
ATOM   1364  N   LYS B2059      15.772  -2.455  28.861  1.00 12.47           N
ATOM   1365  CA  LYS B2059      16.368  -3.546  29.634  1.00 13.35           C
ATOM   1366  CB  LYS B2059      15.579  -3.757  30.947  1.00 14.19           C
ATOM   1367  CG  LYS B2059      15.656  -2.538  31.896  1.00 14.71           C
ATOM   1368  CD  LYS B2059      14.961  -2.754  33.258  1.00 15.04           C
ATOM   1369  CE  LYS B2059      15.045  -1.488  34.124  1.00 16.38           C
ATOM   1370  NZ  LYS B2059      14.590  -1.651  35.545  1.00 15.99           N
ATOM   1371  C   LYS B2059      16.459  -4.846  28.814  1.00 14.13           C
ATOM   1372  O   LYS B2059      17.406  -5.632  28.992  1.00 13.94           O
ATOM   1373  N   GLU B2060      15.500  -5.072  27.907  1.00 13.55           N
ATOM   1374  CA  GLU B2060      15.535  -6.276  27.066  1.00 14.73           C
ATOM   1375  CB  GLU B2060      14.160  -6.552  26.436  1.00 16.24           C
ATOM   1376  CG  GLU B2060      14.173  -7.696  25.413  1.00 20.48           C
ATOM   1377  CD  GLU B2060      14.283  -9.089  26.037  1.00 23.43           C
ATOM   1378  OE1 GLU B2060      14.802  -9.230  27.168  1.00 26.30           O
ATOM   1379  OE2 GLU B2060      13.860 -10.061  25.376  1.00 25.45           O
ATOM   1380  C   GLU B2060      16.608  -6.174  25.960  1.00 13.95           C
ATOM   1381  O   GLU B2060      17.238  -7.178  25.609  1.00 13.52           O
ATOM   1382  N   ALA B2061      16.819  -4.971  25.418  1.00 13.22           N
ATOM   1383  CA  ALA B2061      17.838  -4.765  24.379  1.00 13.62           C
ATOM   1384  CB  ALA B2061      17.740  -3.332  23.801  1.00 13.16           C
ATOM   1385  C   ALA B2061      19.241  -5.022  24.950  1.00 13.67           C
ATOM   1386  O   ALA B2061      20.107  -5.576  24.257  1.00 14.02           O
ATOM   1387  N   PHE B2062      19.463  -4.630  26.207  1.00 13.22           N
ATOM   1388  CA  PHE B2062      20.760  -4.860  26.873  1.00 14.50           C
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ATOM   1389  CB  PHE B2062      20.844  -4.049  28.185  1.00 14.44           C
ATOM   1390  CG  PHE B2062      22.074  -4.353  29.029  1.00 14.90           C
ATOM   1391  CD1 PHE B2062      22.084  -5.445  29.908  1.00 15.30           C
ATOM   1392  CD2 PHE B2062      23.223  -3.571  28.923  1.00 15.56           C
ATOM   1393  CE1 PHE B2062      23.223  -5.752  30.663  1.00 15.94           C
ATOM   1394  CE2 PHE B2062      24.375  -3.869  29.678  1.00 15.34           C
ATOM   1395  CZ  PHE B2062      24.370  -4.961  30.545  1.00 15.50           C
ATOM   1396  C   PHE B2062      20.969  -6.363  27.147  1.00 14.72           C
ATOM   1397  O   PHE B2062      22.063  -6.894  26.938  1.00 14.93           O
ATOM   1398  N   SER B2063      19.922  -7.052  27.599  1.00 14.63           N
ATOM   1399  CA  SER B2063      20.016  -8.490  27.864  1.00 15.27           C
ATOM   1400  CB  SER B2063      18.688  -9.021  28.415  1.00 16.20           C
ATOM   1401  OG  SER B2063      18.406  -8.473  29.694  1.00 18.16           O
ATOM   1402  C   SER B2063      20.379  -9.257  26.579  1.00 15.62           C
ATOM   1403  O   SER B2063      21.187 -10.185  26.607  1.00 14.45           O
ATOM   1404  N   LYS B2064      19.767  -8.872  25.459  1.00 15.61           N
ATOM   1405  CA  LYS B2064      20.049  -9.514  24.175  1.00 16.52           C
ATOM   1406  CB  LYS B2064      19.012  -9.077  23.125  1.00 16.00           C
ATOM   1407  CG  LYS B2064      17.614  -9.664  23.369  1.00 15.31           C
ATOM   1408  CD  LYS B2064      16.563  -9.149  22.365  1.00 17.09           C
ATOM   1409  CE  LYS B2064      16.849  -9.635  20.935  1.00 18.35           C
ATOM   1410  NZ  LYS B2064      15.798  -9.213  19.951  1.00 19.10           N
ATOM   1411  C   LYS B2064      21.470  -9.195  23.694  1.00 17.20           C
ATOM   1412  O   LYS B2064      22.113 -10.024  23.043  1.00 17.94           O
ATOM   1413  N   ALA B2065      21.962  -7.999  24.014  1.00 18.06           N
ATOM   1414  CA  ALA B2065      23.316  -7.605  23.623  1.00 19.56           C
ATOM   1415  CB  ALA B2065      23.545  -6.119  23.922  1.00 20.35           C
ATOM   1416  C   ALA B2065      24.361  -8.453  24.358  1.00 21.22           C
ATOM   1417  O   ALA B2065      25.473  -8.657  23.859  1.00 20.91           O
ATOM   1418  N   MET B2066      24.007  -8.940  25.545  1.00 22.79           N
ATOM   1419  CA  MET B2066      24.924  -9.774  26.331  1.00 25.40           C
ATOM   1420  CB  MET B2066      24.690  -9.573  27.836  1.00 25.98           C
ATOM   1421  CG  MET B2066      25.035  -8.178  28.353  1.00 28.04           C
ATOM   1422  SD  MET B2066      26.596  -8.065  29.288  1.00 31.65           S
ATOM   1423  CE  MET B2066      26.043  -8.670  30.858  1.00 29.68           C
ATOM   1424  C   MET B2066      24.761 -11.256  25.983  1.00 26.28           C
ATOM   1425  O   MET B2066      25.539 -12.095  26.441  1.00 27.12           O
ATOM   1426  N   GLY B2067      23.743 -11.570  25.184  1.00 26.98           N
ATOM   1427  CA  GLY B2067      23.501 -12.943  24.772  1.00 28.85           C
ATOM   1428  C   GLY B2067      22.447 -13.728  25.544  1.00 30.30           C
ATOM   1429  O   GLY B2067      22.379 -14.950  25.408  1.00 30.22           O
ATOM   1430  N   THR B2068      21.618 -13.048  26.335  1.00 31.36           N
ATOM   1431  CA  THR B2068      20.583 -13.729  27.120  1.00 33.00           C
ATOM   1432  CB  THR B2068      21.043 -13.892  28.595  1.00 32.89           C
ATOM   1433  OG1 THR B2068      20.057 -14.628  29.332  1.00 33.56           O
ATOM   1434  CG2 THR B2068      21.253 -12.528  29.248  1.00 32.58           C
ATOM   1435  C   THR B2068      19.217 -13.023  27.083  1.00 33.93           C
ATOM   1436  O   THR B2068      18.867 -12.381  26.091  1.00 34.69           O
ATOM   1437  N   GLY B2069      18.446 -13.157  28.161  1.00 35.37           N
ATOM   1438  CA  GLY B2069      17.132 -12.534  28.239  1.00 36.59           C
ATOM   1439  C   GLY B2069      16.890 -11.870  29.586  1.00 37.70           C
ATOM   1440  O   GLY B2069      17.525 -12.221  30.580  1.00 38.22           O
ATOM   1441  N   ILE B2070      15.960 -10.918  29.631  1.00 38.74           N
ATOM   1442  CA  ILE B2070      15.668 -10.195  30.869  1.00 39.48           C
ATOM   1443  CB  ILE B2070      14.789  -8.948  30.595  1.00 39.69           C
ATOM   1444  CG2 ILE B2070      13.430  -9.375  30.057  1.00 40.00           C
ATOM   1445  CG1 ILE B2070      14.621  -8.132  31.880  1.00 39.65           C
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ATOM   1446  CD1  ILE B2070      15.923  -7.652  32.491  1.00 39.07           C
ATOM   1447  C    ILE B2070      15.008 -11.043  31.960  1.00 40.17           C
ATOM   1448  O    ILE B2070      15.155 -10.748  33.150  1.00 40.22           O
ATOM   1449  N    SER B2071      14.283 -12.087  31.564  1.00 40.66           N
ATOM   1450  CA   SER B2071      13.632 -12.963  32.539  1.00 41.23           C
ATOM   1451  CB   SER B2071      12.702 -13.965  31.841  1.00 41.77           C
ATOM   1452  OG   SER B2071      11.623 -13.319  31.185  1.00 43.00           O
ATOM   1453  C    SER B2071      14.694 -13.729  33.324  1.00 41.05           C
ATOM   1454  O    SER B2071      14.446 -14.202  34.435  1.00 41.50           O
ATOM   1455  N    LYS B2072      15.883 -13.838  32.740  1.00 40.66           N
ATOM   1456  CA   LYS B2072      16.992 -14.554  33.360  1.00 39.81           C
ATOM   1457  CB   LYS B2072      17.754 -15.336  32.286  1.00 40.65           C
ATOM   1458  CG   LYS B2072      16.868 -16.186  31.383  1.00 41.38           C
ATOM   1459  CD   LYS B2072      17.686 -16.871  30.301  1.00 42.22           C
ATOM   1460  CE   LYS B2072      16.818 -17.749  29.419  1.00 42.85           C
ATOM   1461  NZ   LYS B2072      15.748 -16.964  28.747  1.00 43.40           N
ATOM   1462  C    LYS B2072      17.954 -13.620  34.093  1.00 38.99           C
ATOM   1463  O    LYS B2072      18.445 -13.947  35.174  1.00 38.73           O
ATOM   1464  N    LEU B2073      18.214 -12.457  33.502  1.00 38.00           N
ATOM   1465  CA   LEU B2073      19.136 -11.480  34.082  1.00 37.21           C
ATOM   1466  CB   LEU B2073      19.514 -10.444  33.015  1.00 37.84           C
ATOM   1467  CG   LEU B2073      20.842  -9.689  33.144  1.00 38.45           C
ATOM   1468  CD1  LEU B2073      21.202  -9.069  31.801  1.00 38.77           C
ATOM   1469  CD2  LEU B2073      20.738  -8.625  34.226  1.00 38.87           C
ATOM   1470  C    LEU B2073      18.583 -10.784  35.338  1.00 36.22           C
ATOM   1471  O    LEU B2073      19.335 -10.491  36.268  1.00 36.38           O
ATOM   1472  N    GLY B2074      17.276 -10.527  35.366  1.00 34.86           N
ATOM   1473  CA   GLY B2074      16.670  -9.874  36.520  1.00 32.86           C
ATOM   1474  C    GLY B2074      16.457  -8.376  36.351  1.00 31.51           C
ATOM   1475  O    GLY B2074      17.415  -7.625  36.168  1.00 31.09           O
ATOM   1476  N    PHE B2075      15.204  -7.934  36.435  1.00 29.86           N
ATOM   1477  CA   PHE B2075      14.873  -6.516  36.274  1.00 28.90           C
ATOM   1478  CB   PHE B2075      13.348  -6.309  36.264  1.00 29.85           C
ATOM   1479  CG   PHE B2075      12.656  -6.885  35.062  1.00 30.57           C
ATOM   1480  CD1  PHE B2075      12.145  -8.177  35.090  1.00 31.57           C
ATOM   1481  CD2  PHE B2075      12.502  -6.130  33.905  1.00 31.69           C
ATOM   1482  CE1  PHE B2075      11.487  -8.714  33.980  1.00 31.82           C
ATOM   1483  CE2  PHE B2075      11.845  -6.656  32.786  1.00 32.40           C
ATOM   1484  CZ   PHE B2075      11.336  -7.954  32.828  1.00 32.18           C
ATOM   1485  C    PHE B2075      15.470  -5.558  37.310  1.00 27.58           C
ATOM   1486  O    PHE B2075      15.773  -4.409  36.983  1.00 26.85           O
ATOM   1487  N    GLN B2076      15.626  -6.013  38.551  1.00 26.42           N
ATOM   1488  CA   GLN B2076      16.161  -5.156  39.612  1.00 26.02           C
ATOM   1489  CB   GLN B2076      15.829  -5.745  40.995  1.00 26.15           C
ATOM   1490  CG   GLN B2076      14.332  -5.838  41.292  1.00 25.92           C
ATOM   1491  CD   GLN B2076      13.641  -4.482  41.284  1.00 26.13           C
ATOM   1492  OE1  GLN B2076      12.615  -4.300  40.624  1.00 25.80           O
ATOM   1493  NE2  GLN B2076      14.193  -3.528  42.031  1.00 25.89           N
ATOM   1494  C    GLN B2076      17.663  -4.892  39.524  1.00 25.52           C
ATOM   1495  O    GLN B2076      18.195  -4.068  40.276  1.00 25.38           O
ATOM   1496  N    ASP B2077      18.343  -5.576  38.608  1.00 25.07           N
ATOM   1497  CA   ASP B2077      19.789  -5.407  38.448  1.00 25.24           C
ATOM   1498  CB   ASP B2077      20.447  -6.739  38.060  1.00 28.16           C
ATOM   1499  CG   ASP B2077      20.008  -7.895  38.945  1.00 31.24           C
ATOM   1500  OD1  ASP B2077      19.868  -7.699  40.172  1.00 32.43           O
ATOM   1501  OD2  ASP B2077      19.815  -9.009  38.407  1.00 34.01           O
ATOM   1502  C    ASP B2077      20.164  -4.350  37.402  1.00 23.27           C
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ATOM   1503  O   ASP B2077      21.347  -4.096  37.173  1.00 23.32           O
ATOM   1504  N   LEU B2078      19.160  -3.742  36.774  1.00 21.03           N
ATOM   1505  CA  LEU B2078      19.376  -2.717  35.746  1.00 18.79           C
ATOM   1506  CB  LEU B2078      18.923  -3.240  34.370  1.00 18.82           C
ATOM   1507  CG  LEU B2078      19.560  -4.543  33.861  1.00 19.30           C
ATOM   1508  CD1 LEU B2078      18.877  -5.001  32.575  1.00 19.23           C
ATOM   1509  CD2 LEU B2078      21.040  -4.325  33.622  1.00 19.43           C
ATOM   1510  C   LEU B2078      18.582  -1.451  36.081  1.00 18.03           C
ATOM   1511  O   LEU B2078      17.463  -1.543  36.591  1.00 17.56           O
ATOM   1512  N   GLU B2079      19.150  -0.276  35.792  1.00 16.76           N
ATOM   1513  CA  GLU B2079      18.466   0.998  36.060  1.00 15.78           C
ATOM   1514  CB  GLU B2079      18.912   1.563  37.417  1.00 16.39           C
ATOM   1515  CG  GLU B2079      18.136   2.809  37.863  1.00 18.61           C
ATOM   1516  CD  GLU B2079      18.567   3.319  39.237  1.00 19.54           C
ATOM   1517  OE1 GLU B2079      19.725   3.776  39.376  1.00 18.25           O
ATOM   1518  OE2 GLU B2079      17.743   3.257  40.180  1.00 20.67           O
ATOM   1519  C   GLU B2079      18.729   2.029  34.944  1.00 15.93           C
ATOM   1520  O   GLU B2079      19.884   2.233  34.543  1.00 15.32           O
ATOM   1521  N   VAL B2080      17.659   2.666  34.452  1.00 15.15           N
ATOM   1522  CA  VAL B2080      17.735   3.664  33.371  1.00 15.13           C
ATOM   1523  CB  VAL B2080      16.973   3.169  32.083  1.00 14.90           C
ATOM   1524  CG1 VAL B2080      17.063   4.228  30.963  1.00 12.93           C
ATOM   1525  CG2 VAL B2080      17.555   1.844  31.593  1.00 14.67           C
ATOM   1526  C   VAL B2080      17.120   5.015  33.779  1.00 16.52           C
ATOM   1527  O   VAL B2080      15.913   5.096  34.046  1.00 16.43           O
ATOM   1528  N   LEU B2081      17.941   6.069  33.815  1.00 17.23           N
ATOM   1529  CA  LEU B2081      17.469   7.414  34.178  1.00 18.35           C
ATOM   1530  CB  LEU B2081      18.248   7.944  35.398  1.00 18.31           C
ATOM   1531  CG  LEU B2081      18.457   7.034  36.621  1.00 18.74           C
ATOM   1532  CD1 LEU B2081      19.403   7.722  37.602  1.00 19.49           C
ATOM   1533  CD2 LEU B2081      17.128   6.720  37.296  1.00 19.00           C
ATOM   1534  C   LEU B2081      17.657   8.391  33.006  1.00 19.38           C
ATOM   1535  O   LEU B2081      18.257   8.040  31.984  1.00 18.07           O
ATOM   1536  N   ASN B2082      17.148   9.616  33.159  1.00 21.21           N
ATOM   1537  CA  ASN B2082      17.276  10.659  32.125  1.00 23.15           C
ATOM   1538  CB  ASN B2082      15.898  11.236  31.770  1.00 24.29           C
ATOM   1539  CG  ASN B2082      15.110  10.351  30.816  1.00 25.10           C
ATOM   1540  OD1 ASN B2082      15.401  10.292  29.619  1.00 26.00           O
ATOM   1541  ND2 ASN B2082      14.109   9.657  31.343  1.00 24.28           N
ATOM   1542  C   ASN B2082      18.171  11.785  32.654  1.00 23.63           C
ATOM   1543  O   ASN B2082      17.988  12.228  33.785  1.00 24.09           O
ATOM   1544  N   ASN B2083      19.137  12.260  31.864  1.00 24.20           N
ATOM   1545  CA  ASN B2083      20.001  13.328  32.376  1.00 25.17           C
ATOM   1546  CB  ASN B2083      21.395  13.280  31.711  1.00 25.74           C
ATOM   1547  CG  ASN B2083      21.405  13.770  30.270  1.00 25.64           C
ATOM   1548  OD1 ASN B2083      22.425  13.652  29.584  1.00 27.52           O
ATOM   1549  ND2 ASN B2083      20.299  14.327  29.810  1.00 24.85           N
ATOM   1550  C   ASN B2083      19.356  14.718  32.279  1.00 25.54           C
ATOM   1551  O   ASN B2083      18.214  14.844  31.831  1.00 25.60           O
ATOM   1552  N   GLU B2084      20.067  15.759  32.706  1.00 26.28           N
ATOM   1553  CA  GLU B2084      19.490  17.105  32.688  1.00 27.23           C
ATOM   1554  CB  GLU B2084      20.378  18.083  33.479  1.00 28.30           C
ATOM   1555  CG  GLU B2084      21.731  18.411  32.879  1.00 29.51           C
ATOM   1556  CD  GLU B2084      22.612  19.175  33.860  1.00 31.00           C
ATOM   1557  OE1 GLU B2084      22.065  19.983  34.645  1.00 31.91           O
ATOM   1558  OE2 GLU B2084      23.847  18.976  33.847  1.00 30.61           O
ATOM   1559  C   GLU B2084      19.153  17.675  31.307  1.00 27.45           C
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ATOM   1560  O   GLU B2084      18.514  18.725  31.207  1.00 27.41           O
ATOM   1561  N   ARG B2085      19.569  16.986  30.244  1.00 27.72           N
ATOM   1562  CA  ARG B2085      19.259  17.429  28.885  1.00 27.29           C
ATOM   1563  CB  ARG B2085      20.490  17.355  27.976  1.00 29.07           C
ATOM   1564  CG  ARG B2085      21.545  18.411  28.244  1.00 30.86           C
ATOM   1565  CD  ARG B2085      22.540  18.483  27.089  1.00 33.01           C
ATOM   1566  NE  ARG B2085      23.592  19.471  27.319  1.00 34.52           N
ATOM   1567  CZ  ARG B2085      24.556  19.337  28.221  1.00 34.97           C
ATOM   1568  NH1 ARG B2085      24.608  18.252  28.982  1.00 36.01           N
ATOM   1569  NH2 ARG B2085      25.469  20.285  28.363  1.00 35.52           N
ATOM   1570  C   ARG B2085      18.147  16.563  28.294  1.00 26.76           C
ATOM   1571  O   ARG B2085      17.642  16.838  27.203  1.00 26.29           O
ATOM   1572  N   GLY B2086      17.777  15.508  29.018  1.00 25.36           N
ATOM   1573  CA  GLY B2086      16.721  14.623  28.558  1.00 24.19           C
ATOM   1574  C   GLY B2086      17.156  13.325  27.896  1.00 23.02           C
ATOM   1575  O   GLY B2086      16.305  12.537  27.475  1.00 22.83           O
ATOM   1576  N   ALA B2087      18.462  13.083  27.798  1.00 21.71           N
ATOM   1577  CA  ALA B2087      18.938  11.848  27.172  1.00 20.63           C
ATOM   1578  CB  ALA B2087      20.336  12.055  26.576  1.00 21.15           C
ATOM   1579  C   ALA B2087      18.955  10.671  28.157  1.00 19.81           C
ATOM   1580  O   ALA B2087      19.364  10.824  29.315  1.00 18.56           O
ATOM   1581  N   PRO B2088      18.505   9.479  27.707  1.00 18.87           N
ATOM   1582  CD  PRO B2088      17.864   9.249  26.397  1.00 19.36           C
ATOM   1583  CA  PRO B2088      18.461   8.258  28.530  1.00 17.76           C
ATOM   1584  CB  PRO B2088      17.442   7.390  27.790  1.00 18.59           C
ATOM   1585  CG  PRO B2088      17.719   7.724  26.358  1.00 18.87           C
ATOM   1586  C   PRO B2088      19.831   7.571  28.650  1.00 16.87           C
ATOM   1587  O   PRO B2088      20.593   7.559  27.688  1.00 15.25           O
ATOM   1588  N   TYR B2089      20.130   7.002  29.826  1.00 16.14           N
ATOM   1589  CA  TYR B2089      21.405   6.311  30.078  1.00 16.26           C
ATOM   1590  CB  TYR B2089      22.510   7.344  30.377  1.00 17.32           C
ATOM   1591  CG  TYR B2089      22.461   7.951  31.774  1.00 16.96           C
ATOM   1592  CD1 TYR B2089      23.255   7.445  32.810  1.00 18.32           C
ATOM   1593  CE1 TYR B2089      23.217   8.007  34.098  1.00 18.36           C
ATOM   1594  CD2 TYR B2089      21.625   9.031  32.057  1.00 17.32           C
ATOM   1595  CE2 TYR B2089      21.580   9.595  33.332  1.00 18.67           C
ATOM   1596  CZ  TYR B2089      22.379   9.079  34.347  1.00 18.08           C
ATOM   1597  OH  TYR B2089      22.337   9.654  35.601  1.00 19.43           O
ATOM   1598  C   TYR B2089      21.313   5.311  31.250  1.00 16.51           C
ATOM   1599  O   TYR B2089      20.453   5.455  32.127  1.00 16.59           O
ATOM   1600  N   PHE B2090      22.191   4.304  31.261  1.00 16.46           N
ATOM   1601  CA  PHE B2090      22.207   3.292  32.338  1.00 16.71           C
ATOM   1602  CB  PHE B2090      22.803   1.953  31.855  1.00 15.86           C
ATOM   1603  CG  PHE B2090      21.830   1.069  31.099  1.00 16.44           C
ATOM   1604  CD1 PHE B2090      21.652   1.216  29.724  1.00 16.03           C
ATOM   1605  CD2 PHE B2090      21.089   0.094  31.770  1.00 16.46           C
ATOM   1606  CE1 PHE B2090      20.748   0.407  29.022  1.00 16.54           C
ATOM   1607  CE2 PHE B2090      20.179  -0.723  31.084  1.00 16.80           C
ATOM   1608  CZ  PHE B2090      20.008  -0.568  29.709  1.00 16.46           C
ATOM   1609  C   PHE B2090      23.027   3.748  33.550  1.00 17.25           C
ATOM   1610  O   PHE B2090      24.245   3.938  33.445  1.00 16.58           O
ATOM   1611  N   SER B2091      22.372   3.900  34.700  1.00 16.92           N
ATOM   1612  CA  SER B2091      23.068   4.312  35.922  1.00 18.02           C
ATOM   1613  CB  SER B2091      22.148   5.177  36.802  1.00 18.33           C
ATOM   1614  OG  SER B2091      20.902   4.535  37.052  1.00 17.93           O
ATOM   1615  C   SER B2091      23.592   3.105  36.729  1.00 18.66           C
ATOM   1616  O   SER B2091      24.479   3.255  37.582  1.00 18.83           O
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ATOM    1617  N    GLN B2092       23.048    1.920   36.448  1.00 18.75          N
ATOM    1618  CA   GLN B2092       23.438    0.675   37.116  1.00 19.69          C
ATOM    1619  CB   GLN B2092       22.526    0.377   38.313  1.00 21.62          C
ATOM    1620  CG   GLN B2092       22.726    1.259   39.533  1.00 25.05          C
ATOM    1621  CD   GLN B2092       21.981    0.730   40.746  1.00 27.87          C
ATOM    1622  OE1  GLN B2092       20.775    0.944   40.900  1.00 29.82          O
ATOM    1623  NE2  GLN B2092       22.696    0.018   41.611  1.00 29.02          N
ATOM    1624  C    GLN B2092       23.336   -0.512   36.151  1.00 19.36          C
ATOM    1625  O    GLN B2092       22.316   -0.678   35.486  1.00 18.36          O
ATOM    1626  N    ALA B2093       24.383   -1.336   36.094  1.00 18.90          N
ATOM    1627  CA   ALA B2093       24.411   -2.514   35.221  1.00 19.53          C
ATOM    1628  CB   ALA B2093       24.441   -2.073   33.755  1.00 19.53          C
ATOM    1629  C    ALA B2093       25.625   -3.407   35.524  1.00 20.13          C
ATOM    1630  O    ALA B2093       26.641   -2.928   36.024  1.00 20.09          O
ATOM    1631  N    PRO B2094       25.527   -4.720   35.239  1.00 21.00          N
ATOM    1632  CD   PRO B2094       24.303   -5.472   34.892  1.00 21.48          C
ATOM    1633  CA   PRO B2094       26.653   -5.631   35.498  1.00 21.95          C
ATOM    1634  CB   PRO B2094       25.956   -6.963   35.744  1.00 22.34          C
ATOM    1635  CG   PRO B2094       24.808   -6.905   34.739  1.00 22.42          C
ATOM    1636  C    PRO B2094       27.613   -5.677   34.300  1.00 22.30          C
ATOM    1637  O    PRO B2094       27.695   -6.690   33.594  1.00 22.45          O
ATOM    1638  N    PHE B2095       28.331   -4.572   34.083  1.00 22.56          N
ATOM    1639  CA   PHE B2095       29.267   -4.435   32.957  1.00 23.11          C
ATOM    1640  CB   PHE B2095       28.471   -4.089   31.688  1.00 22.75          C
ATOM    1641  CG   PHE B2095       29.307   -3.979   30.439  1.00 22.31          C
ATOM    1642  CD1  PHE B2095       29.484   -2.746   29.812  1.00 22.23          C
ATOM    1643  CD2  PHE B2095       29.898   -5.107   29.876  1.00 22.30          C
ATOM    1644  CE1  PHE B2095       30.237   -2.639   28.640  1.00 22.73          C
ATOM    1645  CE2  PHE B2095       30.655   -5.012   28.705  1.00 22.36          C
ATOM    1646  CZ   PHE B2095       30.825   -3.774   28.085  1.00 21.98          C
ATOM    1647  C    PHE B2095       30.305   -3.340   33.248  1.00 23.62          C
ATOM    1648  O    PHE B2095       29.965   -2.284   33.778  1.00 23.96          O
ATOM    1649  N    SER B2096       31.561   -3.584   32.884  1.00 24.19          N
ATOM    1650  CA   SER B2096       32.636   -2.623   33.143  1.00 25.11          C
ATOM    1651  CB   SER B2096       33.927   -3.376   33.477  1.00 26.30          C
ATOM    1652  OG   SER B2096       33.722   -4.306   34.523  1.00 28.33          O
ATOM    1653  C    SER B2096       32.954   -1.591   32.050  1.00 24.46          C
ATOM    1654  O    SER B2096       33.606   -0.583   32.332  1.00 25.13          O
ATOM    1655  N    GLY B2097       32.513   -1.828   30.818  1.00 23.39          N
ATOM    1656  CA   GLY B2097       32.818   -0.891   29.739  1.00 21.60          C
ATOM    1657  C    GLY B2097       31.823    0.242   29.527  1.00 20.27          C
ATOM    1658  O    GLY B2097       31.138    0.651   30.460  1.00 20.10          O
ATOM    1659  N    LYS B2098       31.756    0.758   28.299  1.00 19.44          N
ATOM    1660  CA   LYS B2098       30.822    1.836   27.954  1.00 17.90          C
ATOM    1661  CB   LYS B2098       31.472    2.822   26.978  1.00 20.19          C
ATOM    1662  CG   LYS B2098       32.604    3.651   27.561  1.00 21.96          C
ATOM    1663  CD   LYS B2098       33.055    4.682   26.543  1.00 24.18          C
ATOM    1664  CE   LYS B2098       34.115    5.612   27.103  1.00 25.70          C
ATOM    1665  NZ   LYS B2098       34.538    6.626   26.087  1.00 27.22          N
ATOM    1666  C    LYS B2098       29.561    1.256   27.309  1.00 16.51          C
ATOM    1667  O    LYS B2098       29.647    0.298   26.543  1.00 14.73          O
ATOM    1668  N    ILE B2099       28.401    1.844   27.621  1.00 15.59          N
ATOM    1669  CA   ILE B2099       27.107    1.395   27.086  1.00 15.02          C
ATOM    1670  CB   ILE B2099       26.144    0.954   28.236  1.00 15.10          C
ATOM    1671  CG2  ILE B2099       24.823    0.429   27.647  1.00 16.11          C
ATOM    1672  CG1  ILE B2099       26.790   -0.138   29.095  1.00 15.18          C
ATOM    1673  CD1  ILE B2099       25.994   -0.462   30.363  1.00 16.41          C
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ATOM   1674  C   ILE B2099      26.406   2.533  26.308  1.00 14.43          C
ATOM   1675  O   ILE B2099      26.039   3.551  26.900  1.00 14.51          O
ATOM   1676  N   TRP B2100      26.207   2.359  25.000  1.00 13.72          N
ATOM   1677  CA  TRP B2100      25.547   3.381  24.173  1.00 13.62          C
ATOM   1678  CB  TRP B2100      26.342   3.558  22.864  1.00 13.58          C
ATOM   1679  CG  TRP B2100      27.817   3.938  23.093  1.00 13.89          C
ATOM   1680  CD2 TRP B2100      28.334   5.257  23.347  1.00 13.95          C
ATOM   1681  CE2 TRP B2100      29.726   5.126  23.597  1.00 14.82          C
ATOM   1682  CE3 TRP B2100      27.755   6.535  23.395  1.00 14.46          C
ATOM   1683  CD1 TRP B2100      28.890   3.085  23.187  1.00 14.49          C
ATOM   1684  NE1 TRP B2100      30.041   3.795  23.492  1.00 14.89          N
ATOM   1685  CZ2 TRP B2100      30.546   6.230  23.895  1.00 15.47          C
ATOM   1686  CZ3 TRP B2100      28.577   7.640  23.697  1.00 15.28          C
ATOM   1687  CH2 TRP B2100      29.955   7.472  23.942  1.00 14.88          C
ATOM   1688  C   TRP B2100      24.071   2.998  23.886  1.00 13.84          C
ATOM   1689  O   TRP B2100      23.816   1.995  23.214  1.00 13.89          O
ATOM   1690  N   LEU B2101      23.120   3.808  24.379  1.00 13.08          N
ATOM   1691  CA  LEU B2101      21.657   3.557  24.239  1.00 12.41          C
ATOM   1692  CB  LEU B2101      21.059   3.267  25.634  1.00 13.29          C
ATOM   1693  CG  LEU B2101      19.524   3.353  25.825  1.00 12.98          C
ATOM   1694  CD1 LEU B2101      18.889   2.043  25.355  1.00 12.28          C
ATOM   1695  CD2 LEU B2101      19.156   3.601  27.303  1.00 12.42          C
ATOM   1696  C   LEU B2101      20.796   4.674  23.602  1.00 11.67          C
ATOM   1697  O   LEU B2101      21.063   5.858  23.811  1.00 11.61          O
ATOM   1698  N   SER B2102      19.760   4.287  22.844  1.00 11.90          N
ATOM   1699  CA  SER B2102      18.799   5.237  22.237  1.00 11.37          C
ATOM   1700  CB  SER B2102      19.212   5.616  20.810  1.00 11.79          C
ATOM   1701  OG  SER B2102      18.405   6.679  20.308  1.00  9.95          O
ATOM   1702  C   SER B2102      17.371   4.634  22.219  1.00 11.48          C
ATOM   1703  O   SER B2102      17.220   3.421  22.026  1.00 11.63          O
ATOM   1704  N   ILE B2103      16.351   5.482  22.425  1.00 10.47          N
ATOM   1705  CA  ILE B2103      14.912   5.096  22.465  1.00 10.97          C
ATOM   1706  CB  ILE B2103      14.337   5.250  23.934  1.00 11.04          C
ATOM   1707  CG2 ILE B2103      12.852   4.835  23.981  1.00 11.15          C
ATOM   1708  CG1 ILE B2103      15.136   4.390  24.924  1.00 10.41          C
ATOM   1709  CD1 ILE B2103      14.781   4.658  26.424  1.00 10.59          C
ATOM   1710  C   ILE B2103      14.042   5.995  21.536  1.00 11.56          C
ATOM   1711  O   ILE B2103      14.327   7.184  21.393  1.00 11.36          O
ATOM   1712  N   SER B2104      12.994   5.435  20.915  1.00 13.13          N
ATOM   1713  CA  SER B2104      12.073   6.214  20.054  1.00 14.88          C
ATOM   1714  CB  SER B2104      12.582   6.263  18.603  1.00 15.92          C
ATOM   1715  OG  SER B2104      11.787   7.132  17.789  1.00 16.21          O
ATOM   1716  C   SER B2104      10.652   5.617  20.070  1.00 15.87          C
ATOM   1717  O   SER B2104      10.485   4.418  20.297  1.00 15.32          O
ATOM   1718  N   HIS B2105       9.623   6.429  19.822  1.00 17.79          N
ATOM   1719  CA  HIS B2105       8.266   5.872  19.833  1.00 19.31          C
ATOM   1720  CB  HIS B2105       7.683   5.921  21.249  1.00 21.32          C
ATOM   1721  CG  HIS B2105       7.405   7.306  21.746  1.00 23.02          C
ATOM   1722  CD2 HIS B2105       6.279   8.058  21.704  1.00 25.09          C
ATOM   1723  ND1 HIS B2105       8.363   8.086  22.356  1.00 25.22          N
ATOM   1724  CE1 HIS B2105       7.841   9.260  22.669  1.00 25.65          C
ATOM   1725  NE2 HIS B2105       6.577   9.269  22.285  1.00 26.41          N
ATOM   1726  C   HIS B2105       7.237   6.486  18.870  1.00 20.14          C
ATOM   1727  O   HIS B2105       7.453   7.560  18.305  1.00 18.58          O
ATOM   1728  N   THR B2106       6.128   5.763  18.687  1.00 20.92          N
ATOM   1729  CA  THR B2106       5.008   6.208  17.852  1.00 23.37          C
ATOM   1730  CB  THR B2106       4.758   5.302  16.612  1.00 23.62          C
ATOM    1731   OG1  THR  B2106      4.237    4.035   17.039   1.00  24.37          O
ATOM    1732   CG2  THR  B2106      6.043    5.092   15.820   1.00  23.72          C
ATOM    1733   C    THR  B2106      3.766    6.106   18.735   1.00  23.79          C
ATOM    1734   O    THR  B2106      3.867    5.875   19.937   1.00  24.63          O
ATOM    1735   N    ASP  B2107      2.591    6.255   18.138   1.00  24.86          N
ATOM    1736   CA   ASP  B2107      1.355    6.176   18.906   1.00  24.83          C
ATOM    1737   CB   ASP  B2107      0.189    6.691   18.059   0.05  24.72          C
ATOM    1738   CG   ASP  B2107     -0.652    7.716   18.790   0.05  24.62          C
ATOM    1739   OD1  ASP  B2107     -1.227    7.372   19.844   0.05  24.64          O
ATOM    1740   OD2  ASP  B2107     -0.738    8.867   18.312   0.05  24.51          O
ATOM    1741   C    ASP  B2107      1.043    4.763   19.403   1.00  24.92          C
ATOM    1742   O    ASP  B2107      0.368    4.598   20.421   1.00  26.07          O
ATOM    1743   N    GLN  B2108      1.535    3.745   18.701   1.00  24.68          N
ATOM    1744   CA   GLN  B2108      1.255    2.361   19.086   1.00  24.22          C
ATOM    1745   CB   GLN  B2108      0.522    1.652   17.939   1.00  25.96          C
ATOM    1746   CG   GLN  B2108     -0.753    2.352   17.462   1.00  27.90          C
ATOM    1747   CD   GLN  B2108     -1.328    1.732   16.189   1.00  29.69          C
ATOM    1748   OE1  GLN  B2108     -2.371    1.073   16.215   1.00  31.19          O
ATOM    1749   NE2  GLN  B2108     -0.641    1.940   15.069   1.00  30.55          N
ATOM    1750   C    GLN  B2108      2.450    1.489   19.517   1.00  23.66          C
ATOM    1751   O    GLN  B2108      2.246    0.490   20.216   1.00  22.94          O
ATOM    1752   N    PHE  B2109      3.672    1.854   19.115   1.00  22.58          N
ATOM    1753   CA   PHE  B2109      4.869    1.058   19.450   1.00  22.19          C
ATOM    1754   CB   PHE  B2109      5.440    0.378   18.187   1.00  23.42          C
ATOM    1755   CG   PHE  B2109      4.409   -0.256   17.287   1.00  25.28          C
ATOM    1756   CD1  PHE  B2109      3.830    0.469   16.248   1.00  26.47          C
ATOM    1757   CD2  PHE  B2109      4.038   -1.586   17.459   1.00  26.35          C
ATOM    1758   CE1  PHE  B2109      2.894   -0.123   15.386   1.00  26.84          C
ATOM    1759   CE2  PHE  B2109      3.106   -2.190   16.607   1.00  27.41          C
ATOM    1760   CZ   PHE  B2109      2.534   -1.454   15.567   1.00  27.07          C
ATOM    1761   C    PHE  B2109      6.031    1.852   20.088   1.00  20.94          C
ATOM    1762   O    PHE  B2109      6.034    3.082   20.086   1.00  20.73          O
ATOM    1763   N    VAL  B2110      7.020    1.128   20.619   1.00  20.20          N
ATOM    1764   CA   VAL  B2110      8.225    1.737   21.210   1.00  18.93          C
ATOM    1765   CB   VAL  B2110      8.115    1.867   22.761   1.00  19.35          C
ATOM    1766   CG1  VAL  B2110      7.968    0.496   23.404   1.00  21.12          C
ATOM    1767   CG2  VAL  B2110      9.339    2.595   23.316   1.00  19.95          C
ATOM    1768   C    VAL  B2110      9.423    0.846   20.845   1.00  18.01          C
ATOM    1769   O    VAL  B2110      9.295   -0.380   20.827   1.00  17.84          O
ATOM    1770   N    THR  B2111     10.576    1.450   20.548   1.00  16.67          N
ATOM    1771   CA   THR  B2111     11.768    0.678   20.170   1.00  15.96          C
ATOM    1772   CB   THR  B2111     11.950    0.693   18.628   1.00  17.10          C
ATOM    1773   OG1  THR  B2111     13.011   -0.201   18.258   1.00  21.79          O
ATOM    1774   CG2  THR  B2111     12.283    2.096   18.141   1.00  17.28          C
ATOM    1775   C    THR  B2111     13.049    1.203   20.839   1.00  14.55          C
ATOM    1776   O    THR  B2111     13.122    2.380   21.194   1.00  12.59          O
ATOM    1777   N    ALA  B2112     14.044    0.326   21.005   1.00  13.42          N
ATOM    1778   CA   ALA  B2112     15.325    0.680   21.644   1.00  12.71          C
ATOM    1779   CB   ALA  B2112     15.247    0.379   23.145   1.00  12.85          C
ATOM    1780   C    ALA  B2112     16.516   -0.078   21.024   1.00  12.80          C
ATOM    1781   O    ALA  B2112     16.348   -1.196   20.535   1.00  13.45          O
ATOM    1782   N    SER  B2113     17.709    0.527   21.060   1.00  12.54          N
ATOM    1783   CA   SER  B2113     18.937   -0.077   20.498   1.00  12.67          C
ATOM    1784   CB   SER  B2113     19.222    0.539   19.115   1.00  12.72          C
ATOM    1785   OG   SER  B2113     20.402    0.007   18.523   1.00  13.88          O
ATOM    1786   C    SER  B2113     20.152    0.142   21.443   1.00  11.86          C
ATOM    1787   O    SER  B2113     20.326    1.247   21.973   1.00  12.14          O
ATOM   1788  N   VAL B2114       20.967  -0.905  21.636  1.00 10.76           N
ATOM   1789  CA  VAL B2114       22.157  -0.885  22.526  1.00 11.02           C
ATOM   1790  CB  VAL B2114       21.912  -1.748  23.810  1.00 10.07           C
ATOM   1791  CG1 VAL B2114       23.204  -1.874  24.619  1.00 12.63           C
ATOM   1792  CG2 VAL B2114       20.808  -1.124  24.689  1.00 11.23           C
ATOM   1793  C   VAL B2114       23.451  -1.438  21.880  1.00 11.08           C
ATOM   1794  O   VAL B2114       23.408  -2.477  21.204  1.00 10.49           O
ATOM   1795  N   ILE B2115       24.584  -0.753  22.093  1.00 11.85           N
ATOM   1796  CA  ILE B2115       25.905  -1.198  21.585  1.00 11.88           C
ATOM   1797  CB  ILE B2115       26.485  -0.236  20.492  1.00 12.44           C
ATOM   1798  CG2 ILE B2115       27.841  -0.756  19.999  1.00 12.78           C
ATOM   1799  CG1 ILE B2115       25.529  -0.134  19.300  1.00 12.56           C
ATOM   1800  CD1 ILE B2115       25.889   0.986  18.331  1.00 12.68           C
ATOM   1801  C   ILE B2115       26.883  -1.197  22.782  1.00 12.95           C
ATOM   1802  O   ILE B2115       26.966  -0.197  23.507  1.00 13.03           O
ATOM   1803  N   LEU B2116       27.600  -2.306  22.994  1.00 12.77           N
ATOM   1804  CA  LEU B2116       28.559  -2.432  24.115  1.00 14.04           C
ATOM   1805  CB  LEU B2116       28.353  -3.785  24.830  1.00 13.62           C
ATOM   1806  CG  LEU B2116       26.929  -4.093  25.349  1.00 14.05           C
ATOM   1807  CD1 LEU B2116       26.866  -5.489  25.971  1.00 15.37           C
ATOM   1808  CD2 LEU B2116       26.520  -3.055  26.384  1.00 14.15           C
ATOM   1809  C   LEU B2116       30.020  -2.296  23.630  1.00 14.81           C
ATOM   1810  O   LEU B2116       30.381  -2.839  22.582  1.00 14.52           O
ATOM   1811  N   GLU B2117       30.858  -1.605  24.409  1.00 16.40           N
ATOM   1812  CA  GLU B2117       32.255  -1.353  24.027  1.00 18.58           C
ATOM   1813  CB  GLU B2117       32.344   0.062  23.426  1.00 18.84           C
ATOM   1814  CG  GLU B2117       33.737   0.570  23.061  1.00 21.74           C
ATOM   1815  CD  GLU B2117       33.703   1.977  22.450  1.00 23.34           C
ATOM   1816  OE1 GLU B2117       33.161   2.908  23.098  1.00 22.55           O
ATOM   1817  OE2 GLU B2117       34.221   2.153  21.322  1.00 24.09           O
ATOM   1818  C   GLU B2117       33.247  -1.495  25.196  1.00 20.32           C
ATOM   1819  O   GLU B2117       32.989  -1.010  26.303  1.00 18.78           O
ATOM   1820  N   GLU B2118       34.384  -2.141  24.931  1.00 22.46           N
ATOM   1821  CA  GLU B2118       35.413  -2.366  25.949  1.00 26.31           C
ATOM   1822  CB  GLU B2118       35.364  -3.830  26.415  1.00 28.48           C
ATOM   1823  CG  GLU B2118       36.185  -4.151  27.657  1.00 31.58           C
ATOM   1824  CD  GLU B2118       35.479  -3.793  28.952  1.00 33.18           C
ATOM   1825  OE1 GLU B2118       34.479  -4.464  29.295  1.00 34.62           O
ATOM   1826  OE2 GLU B2118       35.925  -2.839  29.628  1.00 34.75           O
ATOM   1827  C   GLU B2118       36.820  -2.039  25.435  1.00 27.70           C
ATOM   1828  O   GLU B2118       36.958  -1.559  24.285  1.00 28.17           O
ATOM   1829  OXT GLU B2118       37.784  -2.267  26.199  1.00 29.81           O
TER    1830      GLU B2118
ATOM   1831  CB  MET C3003       38.407   0.566  12.507  1.00 29.11           C
ATOM   1832  CG  MET C3003       38.953  -0.372  11.436  1.00 32.10           C
ATOM   1833  SD  MET C3003       39.971   0.467  10.186  1.00 36.76           S
ATOM   1834  CE  MET C3003       41.535   0.656  11.078  1.00 35.20           C
ATOM   1835  C   MET C3003       36.229  -0.625  12.723  1.00 24.49           C
ATOM   1836  O   MET C3003       36.251  -1.743  12.216  1.00 24.23           O
ATOM   1837  N   MET C3003       38.104  -1.203  14.236  1.00 26.20           N
ATOM   1838  CA  MET C3003       37.432  -0.097  13.493  1.00 26.22           C
ATOM   1839  N   ILE C3004       35.182   0.190  12.648  1.00 22.87           N
ATOM   1840  CA  ILE C3004       33.960  -0.165  11.933  1.00 21.52           C
ATOM   1841  CB  ILE C3004       32.800   0.781  12.355  1.00 21.32           C
ATOM   1842  CG2 ILE C3004       31.535   0.469  11.557  1.00 21.05           C
ATOM   1843  CG1 ILE C3004       32.547   0.638  13.864  1.00 20.83           C
ATOM   1844  CD1 ILE C3004       31.537   1.615  14.443  1.00 20.25           C
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ATOM   1845  C   ILE C3004      34.199  -0.043  10.422  1.00 21.57        C
ATOM   1846  O   ILE C3004      34.938   0.848   9.979  1.00 21.16        O
ATOM   1847  N   VAL C3005      33.610  -0.952   9.638  1.00 20.59        N
ATOM   1848  CA  VAL C3005      33.749  -0.906   8.182  1.00 20.63        C
ATOM   1849  CB  VAL C3005      34.642  -2.068   7.628  1.00 21.47        C
ATOM   1850  CG1 VAL C3005      36.083  -1.890   8.090  1.00 21.00        C
ATOM   1851  CG2 VAL C3005      34.109  -3.413   8.076  1.00 23.00        C
ATOM   1852  C   VAL C3005      32.413  -0.901   7.422  1.00 19.52        C
ATOM   1853  O   VAL C3005      32.411  -0.880   6.192  1.00 19.11        O
ATOM   1854  N   GLY C3006      31.289  -0.906   8.149  1.00 18.23        N
ATOM   1855  CA  GLY C3006      29.974  -0.880   7.508  1.00 17.17        C
ATOM   1856  C   GLY C3006      28.797  -0.986   8.482  1.00 16.61        C
ATOM   1857  O   GLY C3006      28.963  -1.526   9.579  1.00 16.76        O
ATOM   1858  N   HIS C3007      27.620  -0.477   8.093  1.00 15.51        N
ATOM   1859  CA  HIS C3007      26.400  -0.531   8.935  1.00 15.40        C
ATOM   1860  CB  HIS C3007      26.418   0.624   9.953  1.00 15.15        C
ATOM   1861  CG  HIS C3007      25.191   0.709  10.821  1.00 14.61        C
ATOM   1862  CD2 HIS C3007      24.430   1.772  11.180  1.00 14.84        C
ATOM   1863  ND1 HIS C3007      24.668  -0.377  11.493  1.00 15.01        N
ATOM   1864  CE1 HIS C3007      23.639   0.013  12.229  1.00 15.56        C
ATOM   1865  NE2 HIS C3007      23.475   1.313  12.058  1.00 15.15        N
ATOM   1866  C   HIS C3007      25.086  -0.476   8.115  1.00 14.78        C
ATOM   1867  O   HIS C3007      24.933   0.372   7.228  1.00 14.49        O
ATOM   1868  N   GLY C3008      24.145  -1.376   8.418  1.00 14.82        N
ATOM   1869  CA  GLY C3008      22.867  -1.390   7.709  1.00 14.90        C
ATOM   1870  C   GLY C3008      21.668  -1.918   8.495  1.00 15.74        C
ATOM   1871  O   GLY C3008      21.835  -2.757   9.391  1.00 14.75        O
ATOM   1872  N   ILE C3009      20.465  -1.425   8.166  1.00 15.25        N
ATOM   1873  CA  ILE C3009      19.211  -1.847   8.823  1.00 15.66        C
ATOM   1874  CB  ILE C3009      18.692  -0.769   9.837  1.00 14.95        C
ATOM   1875  CG2 ILE C3009      19.789  -0.421  10.873  1.00 15.05        C
ATOM   1876  CG1 ILE C3009      18.261   0.492   9.079  1.00 14.33        C
ATOM   1877  CD1 ILE C3009      17.632   1.555   9.956  1.00 14.63        C
ATOM   1878  C   ILE C3009      18.090  -2.102   7.780  1.00 16.20        C
ATOM   1879  O   ILE C3009      18.221  -1.696   6.619  1.00 16.14        O
ATOM   1880  N   ASP C3010      17.004  -2.762   8.204  1.00 16.80        N
ATOM   1881  CA  ASP C3010      15.853  -3.080   7.330  1.00 17.32        C
ATOM   1882  CB  ASP C3010      16.130  -4.365   6.527  1.00 18.68        C
ATOM   1883  CG  ASP C3010      14.977  -4.741   5.579  1.00 18.99        C
ATOM   1884  OD1 ASP C3010      14.852  -4.105   4.518  1.00 19.45        O
ATOM   1885  OD2 ASP C3010      14.193  -5.667   5.896  1.00 19.42        O
ATOM   1886  C   ASP C3010      14.549  -3.290   8.120  1.00 18.11        C
ATOM   1887  O   ASP C3010      14.580  -3.711   9.283  1.00 17.23        O
ATOM   1888  N   ILE C3011      13.411  -2.978   7.488  1.00 17.97        N
ATOM   1889  CA  ILE C3011      12.082  -3.191   8.081  1.00 18.54        C
ATOM   1890  CB  ILE C3011      11.444  -1.876   8.656  1.00 18.66        C
ATOM   1891  CG2 ILE C3011      11.363  -0.776   7.579  1.00 19.04        C
ATOM   1892  CG1 ILE C3011      10.048  -2.185   9.211  1.00 19.19        C
ATOM   1893  CD1 ILE C3011       9.421  -1.049   9.999  1.00 19.08        C
ATOM   1894  C   ILE C3011      11.207  -3.762   6.950  1.00 18.75        C
ATOM   1895  O   ILE C3011      11.286  -3.288   5.825  1.00 18.39        O
ATOM   1896  N   GLU C3012      10.389  -4.774   7.253  1.00 19.66        N
ATOM   1897  CA  GLU C3012       9.544  -5.433   6.246  1.00 20.80        C
ATOM   1898  CB  GLU C3012      10.290  -6.663   5.706  1.00 22.15        C
ATOM   1899  CG  GLU C3012       9.468  -7.566   4.774  1.00 23.49        C
ATOM   1900  CD  GLU C3012       9.692  -7.274   3.300  1.00 24.70        C
ATOM   1901  OE1 GLU C3012      10.294  -6.228   2.973  1.00 24.77        O
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ATOM   1902  OE2 GLU C3012       9.258  -8.095   2.460  1.00 25.50           O
ATOM   1903  C   GLU C3012       8.160  -5.870   6.759  1.00 21.36           C
ATOM   1904  O   GLU C3012       8.049  -6.431   7.848  1.00 20.37           O
ATOM   1905  N   GLU C3013       7.111  -5.614   5.971  1.00 22.03           N
ATOM   1906  CA  GLU C3013       5.743  -6.004   6.345  1.00 23.43           C
ATOM   1907  CB  GLU C3013       4.703  -5.207   5.534  1.00 24.60           C
ATOM   1908  CG  GLU C3013       4.706  -3.683   5.716  1.00 26.52           C
ATOM   1909  CD  GLU C3013       4.063  -3.212   7.018  1.00 28.49           C
ATOM   1910  OE1 GLU C3013       3.071  -3.834   7.467  1.00 28.55           O
ATOM   1911  OE2 GLU C3013       4.533  -2.192   7.579  1.00 28.72           O
ATOM   1912  C   GLU C3013       5.517  -7.501   6.075  1.00 23.35           C
ATOM   1913  O   GLU C3013       5.931  -8.012   5.032  1.00 23.44           O
ATOM   1914  N   LEU C3014       4.855  -8.198   7.000  1.00 23.78           N
ATOM   1915  CA  LEU C3014       4.578  -9.627   6.818  1.00 24.31           C
ATOM   1916  CB  LEU C3014       3.922 -10.227   8.071  1.00 24.95           C
ATOM   1917  CG  LEU C3014       4.664 -10.149   9.417  1.00 27.00           C
ATOM   1918  CD1 LEU C3014       3.957 -11.044  10.423  1.00 27.46           C
ATOM   1919  CD2 LEU C3014       6.118 -10.589   9.258  1.00 26.69           C
ATOM   1920  C   LEU C3014       3.660  -9.867   5.608  1.00 24.29           C
ATOM   1921  O   LEU C3014       3.680 -10.939   5.004  1.00 23.68           O
ATOM   1922  N   ALA C3015       2.857  -8.868   5.262  1.00 24.50           N
ATOM   1923  CA  ALA C3015       1.946  -8.984   4.120  1.00 24.91           C
ATOM   1924  CB  ALA C3015       1.082  -7.732   4.016  1.00 25.04           C
ATOM   1925  C   ALA C3015       2.691  -9.220   2.803  1.00 25.57           C
ATOM   1926  O   ALA C3015       2.215  -9.962   1.940  1.00 25.88           O
ATOM   1927  N   SER C3016       3.857  -8.592   2.648  1.00 25.61           N
ATOM   1928  CA  SER C3016       4.658  -8.737   1.432  1.00 25.91           C
ATOM   1929  CB  SER C3016       5.829  -7.742   1.441  1.00 26.86           C
ATOM   1930  OG  SER C3016       5.385  -6.401   1.589  1.00 27.09           O
ATOM   1931  C   SER C3016       5.204 -10.159   1.275  1.00 26.38           C
ATOM   1932  O   SER C3016       5.276 -10.690   0.161  1.00 25.43           O
ATOM   1933  N   ILE C3017       5.603 -10.768   2.390  1.00 26.46           N
ATOM   1934  CA  ILE C3017       6.128 -12.131   2.365  1.00 26.86           C
ATOM   1935  CB  ILE C3017       6.839 -12.474   3.706  1.00 26.57           C
ATOM   1936  CG2 ILE C3017       7.306 -13.925   3.709  1.00 26.15           C
ATOM   1937  CG1 ILE C3017       8.029 -11.526   3.923  1.00 26.30           C
ATOM   1938  CD1 ILE C3017       9.102 -11.612   2.842  1.00 26.29           C
ATOM   1939  C   ILE C3017       4.986 -13.129   2.121  1.00 28.01           C
ATOM   1940  O   ILE C3017       5.160 -14.133   1.426  1.00 27.90           O
ATOM   1941  N   GLU C3018       3.816 -12.837   2.679  1.00 28.89           N
ATOM   1942  CA  GLU C3018       2.657 -13.713   2.530  1.00 30.68           C
ATOM   1943  CB  GLU C3018       1.527 -13.250   3.456  1.00 31.08           C
ATOM   1944  CG  GLU C3018       1.936 -13.180   4.919  1.00 32.50           C
ATOM   1945  CD  GLU C3018       0.853 -12.614   5.817  1.00 33.07           C
ATOM   1946  OE1 GLU C3018       0.161 -11.663   5.395  1.00 33.76           O
ATOM   1947  OE2 GLU C3018       0.704 -13.108   6.955  1.00 33.50           O
ATOM   1948  C   GLU C3018       2.144 -13.796   1.092  1.00 31.38           C
ATOM   1949  O   GLU C3018       1.736 -14.868   0.639  1.00 31.29           O
ATOM   1950  N   SER C3019       2.166 -12.677   0.372  1.00 32.24           N
ATOM   1951  CA  SER C3019       1.691 -12.676  -1.008  1.00 33.36           C
ATOM   1952  CB  SER C3019       1.420 -11.240  -1.494  1.00 33.64           C
ATOM   1953  OG  SER C3019       2.610 -10.547  -1.838  1.00 34.47           O
ATOM   1954  C   SER C3019       2.706 -13.364  -1.918  1.00 34.14           C
ATOM   1955  O   SER C3019       2.331 -14.055  -2.864  1.00 34.07           O
ATOM   1956  N   ALA C3020       3.989 -13.191  -1.611  1.00 34.65           N
ATOM   1957  CA  ALA C3020       5.061 -13.791  -2.399  1.00 35.89           C
ATOM   1958  CB  ALA C3020       6.415 -13.247  -1.938  1.00 35.73           C
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ATOM   1959  C   ALA C3020       5.071 -15.322  -2.347  1.00 36.89           C
ATOM   1960  O   ALA C3020       5.451 -15.978  -3.317  1.00 36.66           O
ATOM   1961  N   VAL C3021       4.663 -15.891  -1.217  1.00 38.20           N
ATOM   1962  CA  VAL C3021       4.640 -17.343  -1.078  1.00 40.04           C
ATOM   1963  CB  VAL C3021       4.270 -17.770   0.362  1.00 40.00           C
ATOM   1964  CG1 VAL C3021       4.180 -19.285   0.445  1.00 40.22           C
ATOM   1965  CG2 VAL C3021       5.310 -17.255   1.347  1.00 40.17           C
ATOM   1966  C   VAL C3021       3.636 -17.969  -2.043  1.00 41.37           C
ATOM   1967  O   VAL C3021       3.939 -18.954  -2.718  1.00 41.44           O
ATOM   1968  N   THR C3022       2.443 -17.387  -2.105  1.00 42.72           N
ATOM   1969  CA  THR C3022       1.382 -17.883  -2.974  1.00 44.38           C
ATOM   1970  CB  THR C3022       0.049 -17.160  -2.683  1.00 43.84           C
ATOM   1971  OG1 THR C3022      -0.341 -17.403  -1.326  1.00 43.59           O
ATOM   1972  CG2 THR C3022      -1.048 -17.665  -3.612  1.00 43.81           C
ATOM   1973  C   THR C3022       1.703 -17.738  -4.461  1.00 45.84           C
ATOM   1974  O   THR C3022       1.725 -18.730  -5.193  1.00 45.92           O
ATOM   1975  N   ARG C3023       1.951 -16.508  -4.906  1.00 47.48           N
ATOM   1976  CA  ARG C3023       2.250 -16.253  -6.313  1.00 49.27           C
ATOM   1977  CB  ARG C3023       2.771 -14.823  -6.502  1.00 49.46           C
ATOM   1978  CG  ARG C3023       2.801 -14.390  -7.958  1.00 49.98           C
ATOM   1979  CD  ARG C3023       2.939 -12.884  -8.125  1.00 50.04           C
ATOM   1980  NE  ARG C3023       4.288 -12.399  -7.854  0.05 50.32           N
ATOM   1981  CZ  ARG C3023       4.694 -11.158  -8.105  0.05 50.40           C
ATOM   1982  NH1 ARG C3023       3.853 -10.279  -8.634  0.05 50.48           N
ATOM   1983  NH2 ARG C3023       5.940 -10.797  -7.833  0.05 50.49           N
ATOM   1984  C   ARG C3023       3.260 -17.259  -6.861  1.00 50.29           C
ATOM   1985  O   ARG C3023       2.889 -18.186  -7.580  1.00 50.77           O
ATOM   1986  N   HIS C3024       4.532 -17.074  -6.526  1.00 51.47           N
ATOM   1987  CA  HIS C3024       5.581 -17.988  -6.970  1.00 52.39           C
ATOM   1988  CB  HIS C3024       6.822 -17.207  -7.410  0.05 52.53           C
ATOM   1989  CG  HIS C3024       7.108 -17.304  -8.876  0.05 52.72           C
ATOM   1990  CD2 HIS C3024       7.177 -16.353  -9.838  0.05 52.78           C
ATOM   1991  ND1 HIS C3024       7.367 -18.503  -9.505  0.05 52.78           N
ATOM   1992  CE1 HIS C3024       7.583 -18.287 -10.790  0.05 52.83           C
ATOM   1993  NE2 HIS C3024       7.474 -16.990 -11.018  0.05 52.83           N
ATOM   1994  C   HIS C3024       5.931 -18.911  -5.806  1.00 53.02           C
ATOM   1995  O   HIS C3024       6.822 -18.613  -5.013  1.00 52.97           O
ATOM   1996  N   GLU C3025       5.222 -20.032  -5.712  1.00 53.71           N
ATOM   1997  CA  GLU C3025       5.430 -20.992  -4.632  1.00 54.23           C
ATOM   1998  CB  GLU C3025       4.308 -22.035  -4.647  1.00 55.24           C
ATOM   1999  CG  GLU C3025       4.150 -22.772  -5.965  1.00 56.63           C
ATOM   2000  CD  GLU C3025       2.869 -23.585  -6.024  1.00 57.48           C
ATOM   2001  OE1 GLU C3025       2.657 -24.435  -5.131  1.00 58.10           O
ATOM   2002  OE2 GLU C3025       2.075 -23.372  -6.966  1.00 57.87           O
ATOM   2003  C   GLU C3025       6.796 -21.684  -4.626  1.00 53.75           C
ATOM   2004  O   GLU C3025       6.916 -22.841  -4.227  1.00 53.95           O
ATOM   2005  N   GLY C3026       7.820 -20.961  -5.068  1.00 53.15           N
ATOM   2006  CA  GLY C3026       9.171 -21.492  -5.080  1.00 51.80           C
ATOM   2007  C   GLY C3026      10.057 -20.503  -4.340  1.00 50.97           C
ATOM   2008  O   GLY C3026      11.260 -20.712  -4.167  1.00 50.85           O
ATOM   2009  N   PHE C3027       9.426 -19.418  -3.899  1.00 49.86           N
ATOM   2010  CA  PHE C3027      10.077 -18.331  -3.173  1.00 48.78           C
ATOM   2011  CB  PHE C3027       9.001 -17.419  -2.570  1.00 48.81           C
ATOM   2012  CG  PHE C3027       9.546 -16.198  -1.884  1.00 48.66           C
ATOM   2013  CD1 PHE C3027      10.279 -15.252  -2.593  1.00 48.61           C
ATOM   2014  CD2 PHE C3027       9.313 -15.986  -0.527  1.00 48.69           C
ATOM   2015  CE1 PHE C3027      10.772 -14.111  -1.962  1.00 48.58           C
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ATOM   2016  CE2 PHE C3027       9.802 -14.849   0.113  1.00 48.35           C
ATOM   2017  CZ  PHE C3027      10.533 -13.910  -0.606  1.00 48.38           C
ATOM   2018  C   PHE C3027      11.037 -18.795  -2.076  1.00 47.88           C
ATOM   2019  O   PHE C3027      12.188 -18.364  -2.027  1.00 47.77           O
ATOM   2020  N   ALA C3028      10.558 -19.676  -1.205  1.00 47.03           N
ATOM   2021  CA  ALA C3028      11.362 -20.186  -0.097  1.00 46.36           C
ATOM   2022  CB  ALA C3028      10.529 -21.147   0.741  1.00 46.30           C
ATOM   2023  C   ALA C3028      12.668 -20.862  -0.519  1.00 45.98           C
ATOM   2024  O   ALA C3028      13.735 -20.562   0.026  1.00 46.02           O
ATOM   2025  N   LYS C3029      12.585 -21.774  -1.483  1.00 44.97           N
ATOM   2026  CA  LYS C3029      13.762 -22.497  -1.952  1.00 44.02           C
ATOM   2027  CB  LYS C3029      13.377 -23.478  -3.065  1.00 44.26           C
ATOM   2028  CG  LYS C3029      12.440 -24.589  -2.621  0.05 44.27           C
ATOM   2029  CD  LYS C3029      12.186 -25.576  -3.749  0.05 44.38           C
ATOM   2030  CE  LYS C3029      11.290 -26.717  -3.296  0.05 44.42           C
ATOM   2031  NZ  LYS C3029      11.066 -27.712  -4.380  0.05 44.48           N
ATOM   2032  C   LYS C3029      14.878 -21.586  -2.444  1.00 43.30           C
ATOM   2033  O   LYS C3029      16.055 -21.926  -2.330  1.00 43.66           O
ATOM   2034  N   ARG C3030      14.516 -20.429  -2.988  1.00 42.33           N
ATOM   2035  CA  ARG C3030      15.515 -19.498  -3.495  1.00 41.38           C
ATOM   2036  CB  ARG C3030      14.933 -18.685  -4.655  1.00 41.73           C
ATOM   2037  CG  ARG C3030      14.577 -19.527  -5.870  0.05 41.77           C
ATOM   2038  CD  ARG C3030      14.062 -18.672  -7.016  0.05 41.90           C
ATOM   2039  NE  ARG C3030      13.773 -19.474  -8.202  0.05 42.00           N
ATOM   2040  CZ  ARG C3030      13.329 -18.977  -9.351  0.05 42.04           C
ATOM   2041  NH1 ARG C3030      13.092 -19.784 -10.377  0.05 42.08           N
ATOM   2042  NH2 ARG C3030      13.119 -17.674  -9.476  0.05 42.08           N
ATOM   2043  C   ARG C3030      16.073 -18.551  -2.435  1.00 40.66           C
ATOM   2044  O   ARG C3030      17.141 -17.969  -2.620  1.00 40.56           O
ATOM   2045  N   VAL C3031      15.357 -18.402  -1.324  1.00 39.61           N
ATOM   2046  CA  VAL C3031      15.797 -17.509  -0.252  1.00 38.51           C
ATOM   2047  CB  VAL C3031      14.593 -16.737   0.354  1.00 38.68           C
ATOM   2048  CG1 VAL C3031      15.046 -15.899   1.545  1.00 39.01           C
ATOM   2049  CG2 VAL C3031      13.964 -15.843  -0.703  1.00 39.32           C
ATOM   2050  C   VAL C3031      16.535 -18.222   0.887  1.00 37.22           C
ATOM   2051  O   VAL C3031      17.392 -17.625   1.540  1.00 36.96           O
ATOM   2052  N   LEU C3032      16.215 -19.494   1.109  1.00 35.97           N
ATOM   2053  CA  LEU C3032      16.825 -20.268   2.194  1.00 35.20           C
ATOM   2054  CB  LEU C3032      15.713 -20.865   3.062  1.00 34.43           C
ATOM   2055  CG  LEU C3032      14.682 -19.887   3.635  1.00 34.07           C
ATOM   2056  CD1 LEU C3032      13.508 -20.658   4.224  1.00 34.12           C
ATOM   2057  CD2 LEU C3032      15.340 -19.010   4.694  1.00 33.54           C
ATOM   2058  C   LEU C3032      17.774 -21.395   1.756  1.00 35.04           C
ATOM   2059  O   LEU C3032      17.592 -21.997   0.696  1.00 34.60           O
ATOM   2060  N   THR C3033      18.780 -21.679   2.584  1.00 34.45           N
ATOM   2061  CA  THR C3033      19.729 -22.755   2.293  1.00 34.22           C
ATOM   2062  CB  THR C3033      21.050 -22.619   3.096  1.00 33.96           C
ATOM   2063  OG1 THR C3033      20.797 -22.889   4.481  1.00 33.02           O
ATOM   2064  CG2 THR C3033      21.630 -21.222   2.953  1.00 34.21           C
ATOM   2065  C   THR C3033      19.063 -24.063   2.720  1.00 34.16           C
ATOM   2066  O   THR C3033      17.968 -24.052   3.279  1.00 33.78           O
ATOM   2067  N   ALA C3034      19.729 -25.185   2.472  1.00 34.40           N
ATOM   2068  CA  ALA C3034      19.178 -26.487   2.839  1.00 34.48           C
ATOM   2069  CB  ALA C3034      20.103 -27.598   2.350  1.00 34.65           C
ATOM   2070  C   ALA C3034      18.927 -26.638   4.341  1.00 34.51           C
ATOM   2071  O   ALA C3034      17.867 -27.117   4.751  1.00 34.56           O
ATOM   2072  N   LEU C3035      19.895 -26.233   5.162  1.00 34.52           N
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ATOM   2073  CA  LEU C3035     19.755 -26.345   6.612  1.00 34.61           C
ATOM   2074  CB  LEU C3035     21.087 -26.047   7.308  1.00 34.52           C
ATOM   2075  CG  LEU C3035     21.101 -26.182   8.834  0.05 34.52           C
ATOM   2076  CD1 LEU C3035     20.741 -27.607   9.228  0.05 34.51           C
ATOM   2077  CD2 LEU C3035     22.475 -25.814   9.369  0.05 34.53           C
ATOM   2078  C   LEU C3035     18.675 -25.414   7.156  1.00 35.00           C
ATOM   2079  O   LEU C3035     17.965 -25.769   8.098  1.00 35.04           O
ATOM   2080  N   GLU C3036     18.558 -24.222   6.574  1.00 35.33           N
ATOM   2081  CA  GLU C3036     17.537 -23.263   7.004  1.00 35.62           C
ATOM   2082  CB  GLU C3036     17.741 -21.907   6.310  1.00 34.70           C
ATOM   2083  CG  GLU C3036     18.809 -21.006   6.941  1.00 33.21           C
ATOM   2084  CD  GLU C3036     19.117 -19.767   6.103  1.00 32.82           C
ATOM   2085  OE1 GLU C3036     19.598 -18.759   6.671  1.00 31.24           O
ATOM   2086  OE2 GLU C3036     18.893 -19.803   4.873  1.00 32.21           O
ATOM   2087  C   GLU C3036     16.155 -23.815   6.654  1.00 36.75           C
ATOM   2088  O   GLU C3036     15.205 -23.687   7.427  1.00 36.40           O
ATOM   2089  N   MET C3037     16.064 -24.436   5.481  1.00 38.24           N
ATOM   2090  CA  MET C3037     14.821 -25.018   4.981  1.00 40.09           C
ATOM   2091  CB  MET C3037     15.064 -25.625   3.596  1.00 41.14           C
ATOM   2092  CG  MET C3037     13.808 -26.028   2.834  1.00 43.15           C
ATOM   2093  SD  MET C3037     12.851 -24.618   2.239  1.00 45.06           S
ATOM   2094  CE  MET C3037     11.189 -25.242   2.400  1.00 44.92           C
ATOM   2095  C   MET C3037     14.270 -26.089   5.926  1.00 40.63           C
ATOM   2096  O   MET C3037     13.061 -26.171   6.151  1.00 40.94           O
ATOM   2097  N   GLU C3038     15.159 -26.911   6.473  1.00 41.23           N
ATOM   2098  CA  GLU C3038     14.752 -27.969   7.393  1.00 41.49           C
ATOM   2099  CB  GLU C3038     15.982 -28.713   7.924  1.00 41.61           C
ATOM   2100  CG  GLU C3038     16.711 -29.544   6.878  0.05 41.50           C
ATOM   2101  CD  GLU C3038     15.889 -30.721   6.385  0.05 41.51           C
ATOM   2102  OE1 GLU C3038     16.376 -31.459   5.503  0.05 41.48           O
ATOM   2103  OE2 GLU C3038     14.758 -30.911   6.880  0.05 41.45           O
ATOM   2104  C   GLU C3038     13.958 -27.391   8.559  1.00 41.78           C
ATOM   2105  O   GLU C3038     12.984 -27.989   9.013  1.00 41.81           O
ATOM   2106  N   ARG C3039     14.384 -26.226   9.037  1.00 42.11           N
ATOM   2107  CA  ARG C3039     13.716 -25.550  10.146  1.00 42.69           C
ATOM   2108  CB  ARG C3039     14.580 -24.380  10.634  1.00 43.67           C
ATOM   2109  CG  ARG C3039     13.950 -23.514  11.722  1.00 45.06           C
ATOM   2110  CD  ARG C3039     13.752 -24.276  13.026  1.00 46.69           C
ATOM   2111  NE  ARG C3039     13.295 -23.394  14.099  1.00 47.90           N
ATOM   2112  CZ  ARG C3039     12.966 -23.803  15.321  1.00 48.72           C
ATOM   2113  NH1 ARG C3039     13.040 -25.089  15.637  1.00 49.17           N
ATOM   2114  NH2 ARG C3039     12.563 -22.925  16.230  1.00 49.02           N
ATOM   2115  C   ARG C3039     12.343 -25.034   9.714  1.00 42.44           C
ATOM   2116  O   ARG C3039     11.360 -25.153  10.448  1.00 42.21           O
ATOM   2117  N   PHE C3040     12.293 -24.467   8.512  1.00 42.44           N
ATOM   2118  CA  PHE C3040     11.064 -23.909   7.948  1.00 42.58           C
ATOM   2119  CB  PHE C3040     11.343 -23.394   6.529  1.00 41.84           C
ATOM   2120  CG  PHE C3040     10.165 -22.713   5.879  1.00 41.26           C
ATOM   2121  CD1 PHE C3040      9.621 -21.556   6.428  1.00 40.76           C
ATOM   2122  CD2 PHE C3040      9.610 -23.223   4.708  1.00 40.96           C
ATOM   2123  CE1 PHE C3040      8.541 -20.915   5.821  1.00 40.74           C
ATOM   2124  CE2 PHE C3040      8.527 -22.590   4.090  1.00 40.92           C
ATOM   2125  CZ  PHE C3040      7.992 -21.433   4.649  1.00 40.88           C
ATOM   2126  C   PHE C3040      9.899 -24.902   7.913  1.00 43.12           C
ATOM   2127  O   PHE C3040      8.790 -24.585   8.343  1.00 42.92           O
ATOM   2128  N   THR C3041     10.156 -26.104   7.406  1.00 43.77           N
ATOM   2129  CA  THR C3041      9.119 -27.126   7.303  1.00 44.43           C
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ATOM   2130  CB  THR C3041       9.569 -28.283   6.395  1.00 44.80           C
ATOM   2131  OG1 THR C3041      10.703 -28.936   6.978  1.00 45.05           O
ATOM   2132  CG2 THR C3041       9.935 -27.759   5.016  1.00 45.00           C
ATOM   2133  C   THR C3041       8.676 -27.719   8.635  1.00 44.57           C
ATOM   2134  O   THR C3041       7.611 -28.327   8.721  1.00 44.92           O
ATOM   2135  N   SER C3042       9.488 -27.548   9.672  1.00 44.91           N
ATOM   2136  CA  SER C3042       9.160 -28.091  10.986  1.00 44.98           C
ATOM   2137  CB  SER C3042      10.439 -28.297  11.801  1.00 45.18           C
ATOM   2138  OG  SER C3042      11.336 -29.151  11.110  1.00 45.91           O
ATOM   2139  C   SER C3042       8.194 -27.212  11.770  1.00 44.99           C
ATOM   2140  O   SER C3042       7.536 -27.683  12.699  1.00 45.11           O
ATOM   2141  N   LEU C3043       8.112 -25.938  11.397  1.00 44.68           N
ATOM   2142  CA  LEU C3043       7.228 -24.993  12.073  1.00 44.47           C
ATOM   2143  CB  LEU C3043       7.882 -23.608  12.124  1.00 44.33           C
ATOM   2144  CG  LEU C3043       9.250 -23.485  12.797  1.00 44.21           C
ATOM   2145  CD1 LEU C3043       9.761 -22.052  12.662  1.00 44.22           C
ATOM   2146  CD2 LEU C3043       9.139 -23.875  14.265  1.00 44.47           C
ATOM   2147  C   LEU C3043       5.888 -24.899  11.347  1.00 44.31           C
ATOM   2148  O   LEU C3043       5.738 -25.422  10.240  1.00 44.09           O
ATOM   2149  N   LYS C3044       4.923 -24.221  11.965  1.00 44.27           N
ATOM   2150  CA  LYS C3044       3.601 -24.064  11.365  1.00 44.15           C
ATOM   2151  CB  LYS C3044       2.703 -25.234  11.777  1.00 45.11           C
ATOM   2152  CG  LYS C3044       1.429 -25.375  10.953  1.00 46.10           C
ATOM   2153  CD  LYS C3044       0.462 -26.398  11.547  1.00 47.10           C
ATOM   2154  CE  LYS C3044       1.099 -27.774  11.701  1.00 47.88           C
ATOM   2155  NZ  LYS C3044       2.155 -27.802  12.758  1.00 48.36           N
ATOM   2156  C   LYS C3044       2.924 -22.745  11.753  1.00 43.58           C
ATOM   2157  O   LYS C3044       3.349 -22.062  12.687  1.00 43.58           O
ATOM   2158  N   GLY C3045       1.868 -22.397  11.022  1.00 42.72           N
ATOM   2159  CA  GLY C3045       1.129 -21.177  11.299  1.00 41.65           C
ATOM   2160  C   GLY C3045       1.932 -19.893  11.197  1.00 40.64           C
ATOM   2161  O   GLY C3045       2.788 -19.749  10.323  1.00 40.57           O
ATOM   2162  N   ARG C3046       1.644 -18.956  12.097  1.00 39.78           N
ATOM   2163  CA  ARG C3046       2.327 -17.666  12.129  1.00 38.64           C
ATOM   2164  CB  ARG C3046       1.752 -16.792  13.249  1.00 38.93           C
ATOM   2165  CG  ARG C3046       2.393 -15.415  13.350  0.05 38.89           C
ATOM   2166  CD  ARG C3046       1.769 -14.591  14.465  0.05 38.99           C
ATOM   2167  NE  ARG C3046       0.346 -14.352  14.241  0.05 39.04           N
ATOM   2168  CZ  ARG C3046      -0.428 -13.636  15.050  0.05 39.08           C
ATOM   2169  NH1 ARG C3046      -1.713 -13.471  14.768  0.05 39.09           N
ATOM   2170  NH2 ARG C3046       0.084 -13.084  16.142  0.05 39.12           N
ATOM   2171  C   ARG C3046       3.826 -17.840  12.338  1.00 37.81           C
ATOM   2172  O   ARG C3046       4.629 -17.130  11.735  1.00 37.34           O
ATOM   2173  N   ARG C3047       4.195 -18.785  13.198  1.00 36.94           N
ATOM   2174  CA  ARG C3047       5.601 -19.056  13.485  1.00 35.80           C
ATOM   2175  CB  ARG C3047       5.727 -20.255  14.424  1.00 37.34           C
ATOM   2176  CG  ARG C3047       5.554 -19.924  15.887  1.00 38.72           C
ATOM   2177  CD  ARG C3047       5.695 -21.177  16.731  1.00 40.55           C
ATOM   2178  NE  ARG C3047       6.145 -20.870  18.083  1.00 41.86           N
ATOM   2179  CZ  ARG C3047       7.328 -20.335  18.369  1.00 42.33           C
ATOM   2180  NH1 ARG C3047       8.181 -20.050  17.395  1.00 43.10           N
ATOM   2181  NH2 ARG C3047       7.659 -20.087  19.629  1.00 42.88           N
ATOM   2182  C   ARG C3047       6.408 -19.329  12.223  1.00 34.36           C
ATOM   2183  O   ARG C3047       7.518 -18.812  12.057  1.00 33.67           O
ATOM   2184  N   GLN C3048       5.852 -20.152  11.340  1.00 32.32           N
ATOM   2185  CA  GLN C3048       6.522 -20.493  10.095  1.00 30.19           C
ATOM   2186  CB  GLN C3048       5.709 -21.538   9.326  1.00 30.56           C
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ATOM   2187  CG  GLN C3048       6.346 -21.947   8.010  1.00 31.08           C
ATOM   2188  CD  GLN C3048       5.545 -22.989   7.256  1.00 31.55           C
ATOM   2189  OE1 GLN C3048       4.363 -22.793   6.971  1.00 32.61           O
ATOM   2190  NE2 GLN C3048       6.189 -24.100   6.919  1.00 31.23           N
ATOM   2191  C   GLN C3048       6.749 -19.266   9.211  1.00 28.78           C
ATOM   2192  O   GLN C3048       7.816 -19.113   8.615  1.00 27.77           O
ATOM   2193  N   ILE C3049       5.747 -18.396   9.124  1.00 27.16           N
ATOM   2194  CA  ILE C3049       5.862 -17.195   8.298  1.00 26.51           C
ATOM   2195  CB  ILE C3049       4.485 -16.521   8.086  1.00 26.30           C
ATOM   2196  CG2 ILE C3049       4.647 -15.250   7.255  1.00 26.17           C
ATOM   2197  CG1 ILE C3049       3.530 -17.491   7.380  1.00 26.22           C
ATOM   2198  CD1 ILE C3049       4.023 -17.978   6.014  1.00 26.61           C
ATOM   2199  C   ILE C3049       6.831 -16.178   8.910  1.00 25.94           C
ATOM   2200  O   ILE C3049       7.570 -15.510   8.192  1.00 25.27           O
ATOM   2201  N   GLU C3050       6.824 -16.069  10.236  1.00 26.02           N
ATOM   2202  CA  GLU C3050       7.716 -15.141  10.935  1.00 25.96           C
ATOM   2203  CB  GLU C3050       7.347 -15.075  12.423  1.00 27.39           C
ATOM   2204  CG  GLU C3050       6.073 -14.287  12.724  1.00 29.92           C
ATOM   2205  CD  GLU C3050       6.345 -12.853  13.175  1.00 31.52           C
ATOM   2206  OE1 GLU C3050       7.446 -12.322  12.894  1.00 32.57           O
ATOM   2207  OE2 GLU C3050       5.444 -12.252  13.802  1.00 31.86           O
ATOM   2208  C   GLU C3050       9.195 -15.521  10.792  1.00 24.88           C
ATOM   2209  O   GLU C3050      10.061 -14.650  10.815  1.00 24.17           O
ATOM   2210  N   TYR C3051       9.481 -16.815  10.652  1.00 23.54           N
ATOM   2211  CA  TYR C3051      10.863 -17.281  10.508  1.00 22.59           C
ATOM   2212  CB  TYR C3051      10.941 -18.808  10.711  1.00 23.12           C
ATOM   2213  CG  TYR C3051      12.317 -19.425  10.473  1.00 23.17           C
ATOM   2214  CD1 TYR C3051      12.685 -19.902   9.213  1.00 23.85           C
ATOM   2215  CE1 TYR C3051      13.954 -20.454   8.984  1.00 24.32           C
ATOM   2216  CD2 TYR C3051      13.253 -19.515  11.504  1.00 24.30           C
ATOM   2217  CE2 TYR C3051      14.528 -20.064  11.288  1.00 24.54           C
ATOM   2218  CZ  TYR C3051      14.868 -20.528  10.026  1.00 24.99           C
ATOM   2219  OH  TYR C3051      16.122 -21.050   9.803  1.00 25.78           O
ATOM   2220  C   TYR C3051      11.419 -16.894   9.140  1.00 22.18           C
ATOM   2221  O   TYR C3051      12.546 -16.395   9.031  1.00 20.97           O
ATOM   2222  N   LEU C3052      10.618 -17.115   8.101  1.00 21.39           N
ATOM   2223  CA  LEU C3052      11.016 -16.787   6.736  1.00 21.55           C
ATOM   2224  CB  LEU C3052       9.935 -17.254   5.747  1.00 22.13           C
ATOM   2225  CG  LEU C3052      10.124 -16.929   4.259  1.00 21.93           C
ATOM   2226  CD1 LEU C3052      11.439 -17.515   3.755  1.00 22.55           C
ATOM   2227  CD2 LEU C3052       8.958 -17.495   3.469  1.00 22.75           C
ATOM   2228  C   LEU C3052      11.245 -15.284   6.574  1.00 21.31           C
ATOM   2229  O   LEU C3052      12.196 -14.866   5.914  1.00 21.85           O
ATOM   2230  N   ALA C3053      10.371 -14.484   7.181  1.00 20.68           N
ATOM   2231  CA  ALA C3053      10.454 -13.025   7.102  1.00 20.75           C
ATOM   2232  CB  ALA C3053       9.203 -12.401   7.738  1.00 20.99           C
ATOM   2233  C   ALA C3053      11.720 -12.469   7.768  1.00 20.60           C
ATOM   2234  O   ALA C3053      12.356 -11.552   7.237  1.00 20.36           O
ATOM   2235  N   GLY C3054      12.073 -13.027   8.925  1.00 20.45           N
ATOM   2236  CA  GLY C3054      13.264 -12.597   9.646  1.00 20.63           C
ATOM   2237  C   GLY C3054      14.576 -12.928   8.945  1.00 20.53           C
ATOM   2238  O   GLY C3054      15.550 -12.174   9.034  1.00 19.61           O
ATOM   2239  N   ARG C3055      14.620 -14.065   8.256  1.00 20.88           N
ATOM   2240  CA  ARG C3055      15.824 -14.457   7.527  1.00 21.09           C
ATOM   2241  CB  ARG C3055      15.731 -15.930   7.101  1.00 21.81           C
ATOM   2242  CG  ARG C3055      16.533 -16.895   7.988  1.00 23.24           C
ATOM   2243  CD  ARG C3055      16.139 -16.801   9.465  1.00 23.82           C
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ATOM   2244  NE  ARG C3055      17.018 -17.600  10.325  1.00 23.91          N
ATOM   2245  CZ  ARG C3055      16.881 -17.706  11.646  1.00 24.64          C
ATOM   2246  NH1 ARG C3055      15.901 -17.065  12.267  1.00 23.93          N
ATOM   2247  NH2 ARG C3055      17.719 -18.459  12.352  1.00 25.21          N
ATOM   2248  C   ARG C3055      16.017 -13.552   6.301  1.00 21.23          C
ATOM   2249  O   ARG C3055      17.142 -13.234   5.921  1.00 20.84          O
ATOM   2250  N   TRP C3056      14.911 -13.132   5.694  1.00 21.62          N
ATOM   2251  CA  TRP C3056      14.958 -12.247   4.529  1.00 22.92          C
ATOM   2252  CB  TRP C3056      13.559 -12.121   3.910  1.00 25.18          C
ATOM   2253  CG  TRP C3056      13.515 -11.388   2.594  1.00 27.65          C
ATOM   2254  CD2 TRP C3056      13.357  -9.977   2.401  1.00 28.51          C
ATOM   2255  CE2 TRP C3056      13.413  -9.736   1.009  1.00 29.11          C
ATOM   2256  CE3 TRP C3056      13.176  -8.892   3.269  1.00 29.11          C
ATOM   2257  CD1 TRP C3056      13.656 -11.931   1.344  1.00 28.78          C
ATOM   2258  NE1 TRP C3056      13.596 -10.944   0.388  1.00 29.88          N
ATOM   2259  CZ2 TRP C3056      13.296  -8.453   0.465  1.00 28.95          C
ATOM   2260  CZ3 TRP C3056      13.060  -7.614   2.726  1.00 29.68          C
ATOM   2261  CH2 TRP C3056      13.121  -7.409   1.336  1.00 29.31          C
ATOM   2262  C   TRP C3056      15.453 -10.855   4.953  1.00 22.17          C
ATOM   2263  O   TRP C3056      16.286 -10.247   4.281  1.00 22.33          O
ATOM   2264  N   SER C3057      14.942 -10.365   6.078  1.00 21.01          N
ATOM   2265  CA  SER C3057      15.311  -9.041   6.587  1.00 20.66          C
ATOM   2266  CB  SER C3057      14.388  -8.663   7.751  1.00 21.23          C
ATOM   2267  OG  SER C3057      14.569  -7.311   8.147  1.00 22.78          O
ATOM   2268  C   SER C3057      16.786  -8.969   7.025  1.00 20.18          C
ATOM   2269  O   SER C3057      17.464  -7.959   6.803  1.00 19.84          O
ATOM   2270  N   ALA C3058      17.280 -10.043   7.633  1.00 18.66          N
ATOM   2271  CA  ALA C3058      18.671 -10.090   8.085  1.00 18.83          C
ATOM   2272  CB  ALA C3058      18.905 -11.344   8.939  1.00 17.30          C
ATOM   2273  C   ALA C3058      19.663 -10.062   6.915  1.00 18.44          C
ATOM   2274  O   ALA C3058      20.693  -9.381   6.980  1.00 18.07          O
ATOM   2275  N   LYS C3059      19.359 -10.803   5.851  1.00 18.60          N
ATOM   2276  CA  LYS C3059      20.252 -10.850   4.692  1.00 18.76          C
ATOM   2277  CB  LYS C3059      19.848 -12.012   3.766  1.00 18.60          C
ATOM   2278  CG  LYS C3059      19.956 -13.396   4.447  1.00 18.86          C
ATOM   2279  CD  LYS C3059      19.739 -14.578   3.494  1.00 19.28          C
ATOM   2280  CE  LYS C3059      19.815 -15.920   4.244  1.00 20.00          C
ATOM   2281  NZ  LYS C3059      19.590 -17.130   3.388  1.00 20.93          N
ATOM   2282  C   LYS C3059      20.274  -9.508   3.938  1.00 19.50          C
ATOM   2283  O   LYS C3059      21.306  -9.117   3.388  1.00 20.13          O
ATOM   2284  N   GLU C3060      19.142  -8.804   3.935  1.00 20.20          N
ATOM   2285  CA  GLU C3060      19.026  -7.501   3.277  1.00 20.95          C
ATOM   2286  CB  GLU C3060      17.550  -7.090   3.205  1.00 23.10          C
ATOM   2287  CG  GLU C3060      17.268  -5.738   2.545  1.00 26.69          C
ATOM   2288  CD  GLU C3060      17.579  -5.717   1.055  1.00 29.57          C
ATOM   2289  OE1 GLU C3060      17.161  -6.660   0.341  1.00 30.70          O
ATOM   2290  OE2 GLU C3060      18.232  -4.749   0.598  1.00 31.10          O
ATOM   2291  C   GLU C3060      19.837  -6.432   4.030  1.00 20.53          C
ATOM   2292  O   GLU C3060      20.455  -5.563   3.414  1.00 20.28          O
ATOM   2293  N   ALA C3061      19.838  -6.497   5.360  1.00 19.74          N
ATOM   2294  CA  ALA C3061      20.591  -5.531   6.165  1.00 19.24          C
ATOM   2295  CB  ALA C3061      20.252  -5.696   7.656  1.00 19.62          C
ATOM   2296  C   ALA C3061      22.097  -5.711   5.938  1.00 18.92          C
ATOM   2297  O   ALA C3061      22.848  -4.732   5.885  1.00 18.37          O
ATOM   2298  N   PHE C3062      22.530  -6.963   5.811  1.00 18.75          N
ATOM   2299  CA  PHE C3062      23.941  -7.270   5.570  1.00 19.65          C
ATOM   2300  CB  PHE C3062      24.190  -8.783   5.714  1.00 19.70          C
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ATOM   2301  CG  PHE C3062       25.592  -9.224   5.325  1.00 20.12           C
ATOM   2302  CD1 PHE C3062       25.917  -9.472   3.988  1.00 20.55           C
ATOM   2303  CD2 PHE C3062       26.577  -9.391   6.293  1.00 20.19           C
ATOM   2304  CE1 PHE C3062       27.200  -9.883   3.622  1.00 21.03           C
ATOM   2305  CE2 PHE C3062       27.871  -9.803   5.940  1.00 20.44           C
ATOM   2306  CZ  PHE C3062       28.181 -10.049   4.598  1.00 20.96           C
ATOM   2307  C   PHE C3062       24.381  -6.784   4.182  1.00 20.13           C
ATOM   2308  O   PHE C3062       25.474  -6.231   4.037  1.00 20.04           O
ATOM   2309  N   SER C3063       23.530  -6.981   3.174  1.00 21.29           N
ATOM   2310  CA  SER C3063       23.840  -6.551   1.808  1.00 22.13           C
ATOM   2311  CB  SER C3063       22.727  -6.967   0.832  1.00 22.59           C
ATOM   2312  OG  SER C3063       22.699  -8.374   0.636  1.00 24.36           O
ATOM   2313  C   SER C3063       24.019  -5.032   1.762  1.00 22.61           C
ATOM   2314  O   SER C3063       24.913  -4.527   1.082  1.00 22.10           O
ATOM   2315  N   LYS C3064       23.160  -4.309   2.477  1.00 22.80           N
ATOM   2316  CA  LYS C3064       23.257  -2.852   2.530  1.00 24.07           C
ATOM   2317  CB  LYS C3064       22.013  -2.261   3.210  1.00 23.92           C
ATOM   2318  CG  LYS C3064       20.734  -2.376   2.377  1.00 23.95           C
ATOM   2319  CD  LYS C3064       19.505  -1.886   3.138  1.00 24.12           C
ATOM   2320  CE  LYS C3064       19.616  -0.407   3.519  1.00 24.30           C
ATOM   2321  NZ  LYS C3064       18.388   0.060   4.209  1.00 24.43           N
ATOM   2322  C   LYS C3064       24.519  -2.408   3.281  1.00 24.84           C
ATOM   2323  O   LYS C3064       25.132  -1.401   2.939  1.00 24.90           O
ATOM   2324  N   ALA C3065       24.916  -3.166   4.297  1.00 26.22           N
ATOM   2325  CA  ALA C3065       26.101  -2.818   5.079  1.00 28.20           C
ATOM   2326  CB  ALA C3065       26.184  -3.693   6.324  1.00 28.57           C
ATOM   2327  C   ALA C3065       27.396  -2.943   4.277  1.00 30.15           C
ATOM   2328  O   ALA C3065       28.346  -2.188   4.492  1.00 29.72           O
ATOM   2329  N   MET C3066       27.435  -3.903   3.361  1.00 32.11           N
ATOM   2330  CA  MET C3066       28.629  -4.113   2.555  1.00 35.57           C
ATOM   2331  CB  MET C3066       28.706  -5.577   2.115  1.00 36.03           C
ATOM   2332  CG  MET C3066       30.087  -5.993   1.635  1.00 38.01           C
ATOM   2333  SD  MET C3066       30.589  -7.586   2.315  1.00 39.43           S
ATOM   2334  CE  MET C3066       29.820  -8.664   1.141  1.00 38.43           C
ATOM   2335  C   MET C3066       28.641  -3.186   1.340  1.00 37.25           C
ATOM   2336  O   MET C3066       29.690  -2.928   0.753  1.00 37.48           O
ATOM   2337  N   GLY C3067       27.468  -2.678   0.978  1.00 39.12           N
ATOM   2338  CA  GLY C3067       27.372  -1.782  -0.158  1.00 41.84           C
ATOM   2339  C   GLY C3067       27.338  -2.554  -1.458  1.00 43.68           C
ATOM   2340  O   GLY C3067       28.251  -2.446  -2.277  1.00 44.30           O
ATOM   2341  N   THR C3068       26.281  -3.337  -1.648  1.00 45.16           N
ATOM   2342  CA  THR C3068       26.133  -4.140  -2.853  1.00 46.52           C
ATOM   2343  CB  THR C3068       27.012  -5.409  -2.771  1.00 46.98           C
ATOM   2344  OG1 THR C3068       26.723  -6.268  -3.880  1.00 47.83           O
ATOM   2345  CG2 THR C3068       26.756  -6.154  -1.469  1.00 47.19           C
ATOM   2346  C   THR C3068       24.679  -4.546  -3.076  1.00 47.27           C
ATOM   2347  O   THR C3068       23.940  -4.800  -2.123  1.00 47.53           O
ATOM   2348  N   GLY C3069       24.272  -4.597  -4.341  1.00 47.97           N
ATOM   2349  CA  GLY C3069       22.908  -4.969  -4.668  1.00 48.41           C
ATOM   2350  C   GLY C3069       22.848  -6.140  -5.629  1.00 48.94           C
ATOM   2351  O   GLY C3069       22.349  -5.952  -6.758  1.00 49.17           O
ATOM   2352  OXT GLY C3069       23.304  -7.244  -5.257  1.00 49.26           O
TER    2353      GLY C3069
ATOM   2354  C   GLY C3074       23.102 -14.343  -2.448  1.00 42.87           C
ATOM   2355  O   GLY C3074       23.918 -14.155  -1.552  1.00 43.22           O
ATOM   2356  N   GLY C3074       23.249 -12.549  -4.163  1.00 43.05           N
ATOM   2357  CA  GLY C3074       23.446 -14.000  -3.885  1.00 42.94           C
ATOM   2358  N    PHE C3075      21.892 -14.845  -2.228  1.00 42.82           N
ATOM   2359  CA   PHE C3075      21.441 -15.212  -0.890  1.00 42.97           C
ATOM   2360  CB   PHE C3075      19.920 -15.035  -0.787  1.00 43.13           C
ATOM   2361  CG   PHE C3075      19.484 -13.638  -0.400  1.00 43.82           C
ATOM   2362  CD1  PHE C3075      20.299 -12.534  -0.647  1.00 43.85           C
ATOM   2363  CD2  PHE C3075      18.243 -13.429   0.199  1.00 43.74           C
ATOM   2364  CE1  PHE C3075      19.883 -11.243  -0.304  1.00 44.03           C
ATOM   2365  CE2  PHE C3075      17.817 -12.144   0.545  1.00 44.13           C
ATOM   2366  CZ   PHE C3075      18.639 -11.049   0.293  1.00 44.14           C
ATOM   2367  C    PHE C3075      21.826 -16.639  -0.516  1.00 42.74           C
ATOM   2368  O    PHE C3075      21.820 -17.007   0.661  1.00 42.92           O
ATOM   2369  N    GLN C3076      22.175 -17.438  -1.518  1.00 42.00           N
ATOM   2370  CA   GLN C3076      22.548 -18.824  -1.276  1.00 41.00           C
ATOM   2371  CB   GLN C3076      22.537 -19.615  -2.587  1.00 41.57           C
ATOM   2372  CG   GLN C3076      21.135 -19.865  -3.119  1.00 42.06           C
ATOM   2373  CD   GLN C3076      20.286 -20.695  -2.171  1.00 42.45           C
ATOM   2374  OE1  GLN C3076      19.056 -20.670  -2.243  1.00 42.81           O
ATOM   2375  NE2  GLN C3076      20.938 -21.445  -1.284  1.00 42.52           N
ATOM   2376  C    GLN C3076      23.892 -18.977  -0.584  1.00 40.27           C
ATOM   2377  O    GLN C3076      24.216 -20.060  -0.103  1.00 40.25           O
ATOM   2378  N    ASP C3077      24.682 -17.907  -0.537  1.00 38.81           N
ATOM   2379  CA   ASP C3077      25.965 -17.981   0.148  1.00 37.42           C
ATOM   2380  CB   ASP C3077      27.107 -17.527  -0.769  1.00 39.03           C
ATOM   2381  CG   ASP C3077      27.008 -16.075  -1.152  1.00 40.35           C
ATOM   2382  OD1  ASP C3077      25.897 -15.635  -1.514  1.00 41.46           O
ATOM   2383  OD2  ASP C3077      28.048 -15.379  -1.102  1.00 40.89           O
ATOM   2384  C    ASP C3077      25.926 -17.158   1.438  1.00 35.34           C
ATOM   2385  O    ASP C3077      26.916 -16.556   1.848  1.00 35.66           O
ATOM   2386  N    LEU C3078      24.751 -17.142   2.060  1.00 32.99           N
ATOM   2387  CA   LEU C3078      24.513 -16.456   3.328  1.00 30.22           C
ATOM   2388  CB   LEU C3078      23.775 -15.127   3.113  1.00 30.01           C
ATOM   2389  CG   LEU C3078      24.478 -13.972   2.393  1.00 30.35           C
ATOM   2390  CD1  LEU C3078      23.555 -12.762   2.352  1.00 29.89           C
ATOM   2391  CD2  LEU C3078      25.768 -13.615   3.114  1.00 31.03           C
ATOM   2392  C    LEU C3078      23.632 -17.392   4.165  1.00 27.99           C
ATOM   2393  O    LEU C3078      22.645 -17.927   3.659  1.00 27.40           O
ATOM   2394  N    GLU C3079      23.984 -17.589   5.435  1.00 25.61           N
ATOM   2395  CA   GLU C3079      23.206 -18.467   6.310  1.00 24.01           C
ATOM   2396  CB   GLU C3079      23.815 -19.876   6.284  1.00 24.83           C
ATOM   2397  CG   GLU C3079      23.137 -20.897   7.190  1.00 25.45           C
ATOM   2398  CD   GLU C3079      23.716 -22.290   7.022  1.00 26.01           C
ATOM   2399  OE1  GLU C3079      23.270 -23.022   6.110  1.00 26.62           O
ATOM   2400  OE2  GLU C3079      24.627 -22.648   7.797  1.00 25.76           O
ATOM   2401  C    GLU C3079      23.113 -17.945   7.756  1.00 22.32           C
ATOM   2402  O    GLU C3079      24.113 -17.500   8.335  1.00 21.78           O
ATOM   2403  N    VAL C3080      21.905 -18.007   8.319  1.00 20.99           N
ATOM   2404  CA   VAL C3080      21.616 -17.554   9.685  1.00 19.93           C
ATOM   2405  CB   VAL C3080      20.634 -16.347   9.666  1.00 19.55           C
ATOM   2406  CG1  VAL C3080      20.302 -15.911  11.099  1.00 18.41           C
ATOM   2407  CG2  VAL C3080      21.246 -15.183   8.878  1.00 19.42           C
ATOM   2408  C    VAL C3080      20.992 -18.667  10.550  1.00 20.28           C
ATOM   2409  O    VAL C3080      19.888 -19.140  10.261  1.00 19.70           O
ATOM   2410  N    LEU C3081      21.701 -19.075  11.606  1.00 20.21           N
ATOM   2411  CA   LEU C3081      21.232 -20.121  12.521  1.00 21.05           C
ATOM   2412  CB   LEU C3081      22.240 -21.290  12.559  1.00 21.12           C
ATOM   2413  CG   LEU C3081      22.698 -21.950  11.246  1.00 20.96           C
ATOM   2414  CD1  LEU C3081      23.699 -23.067  11.542  1.00 21.74           C
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ATOM    2415  CD2 LEU C3081      21.497 -22.498  10.489  1.00 20.34           C
ATOM    2416  C   LEU C3081      21.041 -19.566  13.948  1.00 21.83           C
ATOM    2417  O   LEU C3081      21.340 -18.399  14.211  1.00 20.95           O
ATOM    2418  N   ASN C3082      20.546 -20.411  14.855  1.00 22.96           N
ATOM    2419  CA  ASN C3082      20.322 -20.043  16.262  1.00 24.19           C
ATOM    2420  CB  ASN C3082      18.857 -20.281  16.654  1.00 24.95           C
ATOM    2421  CG  ASN C3082      17.913 -19.223  16.101  1.00 25.21           C
ATOM    2422  OD1 ASN C3082      17.843 -18.100  16.611  1.00 26.05           O
ATOM    2423  ND2 ASN C3082      17.184 -19.577  15.055  1.00 24.39           N
ATOM    2424  C   ASN C3082      21.212 -20.890  17.184  1.00 24.76           C
ATOM    2425  O   ASN C3082      21.268 -22.114  17.034  1.00 24.23           O
ATOM    2426  N   ASN C3083      21.901 -20.258  18.133  1.00 24.88           N
ATOM    2427  CA  ASN C3083      22.753 -21.024  19.046  1.00 26.41           C
ATOM    2428  CB  ASN C3083      23.880 -20.147  19.619  1.00 26.57           C
ATOM    2429  CG  ASN C3083      23.394 -19.088  20.603  1.00 27.00           C
ATOM    2430  OD1 ASN C3083      24.185 -18.255  21.047  1.00 28.80           O
ATOM    2431  ND2 ASN C3083      22.114 -19.115  20.952  1.00 25.26           N
ATOM    2432  C   ASN C3083      21.922 -21.676  20.159  1.00 26.81           C
ATOM    2433  O   ASN C3083      20.697 -21.536  20.178  1.00 26.49           O
ATOM    2434  N   GLU C3084      22.567 -22.390  21.078  1.00 27.91           N
ATOM    2435  CA  GLU C3084      21.815 -23.070  22.132  1.00 28.75           C
ATOM    2436  CB  GLU C3084      22.716 -24.035  22.917  1.00 29.93           C
ATOM    2437  CG  GLU C3084      24.064 -23.506  23.335  1.00 31.45           C
ATOM    2438  CD  GLU C3084      24.916 -24.594  23.966  1.00 32.85           C
ATOM    2439  OE1 GLU C3084      26.051 -24.298  24.397  1.00 33.48           O
ATOM    2440  OE2 GLU C3084      24.445 -25.752  24.029  1.00 33.46           O
ATOM    2441  C   GLU C3084      21.024 -22.189  23.092  1.00 28.50           C
ATOM    2442  O   GLU C3084      20.074 -22.664  23.714  1.00 28.13           O
ATOM    2443  N   ARG C3085      21.399 -20.917  23.215  1.00 28.57           N
ATOM    2444  CA  ARG C3085      20.661 -20.001  24.085  1.00 28.82           C
ATOM    2445  CB  ARG C3085      21.584 -18.929  24.670  1.00 29.93           C
ATOM    2446  CG  ARG C3085      22.566 -19.469  25.692  1.00 31.34           C
ATOM    2447  CD  ARG C3085      22.949 -18.409  26.713  1.00 33.11           C
ATOM    2448  NE  ARG C3085      23.902 -18.936  27.683  1.00 33.67           N
ATOM    2449  CZ  ARG C3085      25.167 -19.217  27.398  1.00 34.16           C
ATOM    2450  NH1 ARG C3085      25.630 -19.014  26.171  1.00 34.21           N
ATOM    2451  NH2 ARG C3085      25.965 -19.715  28.330  1.00 33.81           N
ATOM    2452  C   ARG C3085      19.519 -19.332  23.318  1.00 28.44           C
ATOM    2453  O   ARG C3085      18.663 -18.667  23.912  1.00 28.67           O
ATOM    2454  N   GLY C3086      19.522 -19.496  21.996  1.00 27.15           N
ATOM    2455  CA  GLY C3086      18.466 -18.928  21.170  1.00 26.89           C
ATOM    2456  C   GLY C3086      18.800 -17.712  20.316  1.00 26.43           C
ATOM    2457  O   GLY C3086      17.942 -17.229  19.581  1.00 26.94           O
ATOM    2458  N   ALA C3087      20.031 -17.218  20.396  1.00 25.34           N
ATOM    2459  CA  ALA C3087      20.432 -16.043  19.622  1.00 25.00           C
ATOM    2460  CB  ALA C3087      21.610 -15.361  20.300  1.00 25.01           C
ATOM    2461  C   ALA C3087      20.788 -16.355  18.163  1.00 24.71           C
ATOM    2462  O   ALA C3087      21.385 -17.394  17.867  1.00 23.78           O
ATOM    2463  N   PRO C3088      20.413 -15.457  17.231  1.00 23.74           N
ATOM    2464  CD  PRO C3088      19.533 -14.291  17.448  1.00 24.91           C
ATOM    2465  CA  PRO C3088      20.697 -15.631  15.800  1.00 23.12           C
ATOM    2466  CB  PRO C3088      19.628 -14.762  15.136  1.00 24.34           C
ATOM    2467  CG  PRO C3088      19.551 -13.593  16.083  1.00 24.53           C
ATOM    2468  C   PRO C3088      22.115 -15.157  15.466  1.00 22.17           C
ATOM    2469  O   PRO C3088      22.606 -14.198  16.070  1.00 21.42           O
ATOM    2470  N   TYR C3089      22.765 -15.826  14.512  1.00 20.38           N
ATOM    2471  CA  TYR C3089      24.128 -15.469  14.098  1.00 19.72           C
ATOM    2472  CB   TYR C3089        25.149 -16.054   15.097   1.00 19.67            C
ATOM    2473  CG   TYR C3089        25.352 -17.564   15.029   1.00 19.93            C
ATOM    2474  CD1  TYR C3089        26.410 -18.110   14.294   1.00 21.07            C
ATOM    2475  CE1  TYR C3089        26.594 -19.497   14.194   1.00 20.45            C
ATOM    2476  CD2  TYR C3089        24.477 -18.446   15.672   1.00 20.53            C
ATOM    2477  CE2  TYR C3089        24.653 -19.848   15.578   1.00 20.54            C
ATOM    2478  CZ   TYR C3089        25.717 -20.359   14.833   1.00 20.66            C
ATOM    2479  OH   TYR C3089        25.908 -21.725   14.713   1.00 19.20            O
ATOM    2480  C    TYR C3089        24.428 -15.972   12.671   1.00 19.17            C
ATOM    2481  O    TYR C3089        23.820 -16.944   12.213   1.00 17.72            O
ATOM    2482  N    PHE C3090        25.340 -15.295   11.967   1.00 19.73            N
ATOM    2483  CA   PHE C3090        25.729 -15.704   10.607   1.00 20.26            C
ATOM    2484  CB   PHE C3090        26.310 -14.529    9.800   1.00 20.96            C
ATOM    2485  CG   PHE C3090        25.274 -13.607    9.198   1.00 20.15            C
ATOM    2486  CD1  PHE C3090        24.812 -12.499    9.902   1.00 20.78            C
ATOM    2487  CD2  PHE C3090        24.791 -13.831    7.912   1.00 20.37            C
ATOM    2488  CE1  PHE C3090        23.880 -11.620    9.330   1.00 20.73            C
ATOM    2489  CE2  PHE C3090        23.860 -12.964    7.326   1.00 20.67            C
ATOM    2490  CZ   PHE C3090        23.404 -11.853    8.040   1.00 20.35            C
ATOM    2491  C    PHE C3090        26.788 -16.812   10.637   1.00 20.91            C
ATOM    2492  O    PHE C3090        27.905 -16.598   11.117   1.00 20.54            O
ATOM    2493  N    SER C3091        26.442 -17.986   10.116   1.00 21.82            N
ATOM    2494  CA   SER C3091        27.378 -19.113   10.073   1.00 22.73            C
ATOM    2495  CB   SER C3091        26.630 -20.435   10.290   1.00 22.96            C
ATOM    2496  OG   SER C3091        25.613 -20.617    9.318   1.00 23.28            O
ATOM    2497  C    SER C3091        28.137 -19.164    8.738   1.00 23.33            C
ATOM    2498  O    SER C3091        29.114 -19.904    8.604   1.00 22.86            O
ATOM    2499  N    GLN C3092        27.683 -18.375    7.762   1.00 23.62            N
ATOM    2500  CA   GLN C3092        28.309 -18.319    6.436   1.00 24.85            C
ATOM    2501  CB   GLN C3092        27.730 -19.439    5.558   1.00 25.88            C
ATOM    2502  CG   GLN C3092        28.045 -19.357    4.064   1.00 28.11            C
ATOM    2503  CD   GLN C3092        29.529 -19.339    3.762   1.00 29.40            C
ATOM    2504  OE1  GLN C3092        30.298 -20.131    4.310   1.00 31.43            O
ATOM    2505  NE2  GLN C3092        29.940 -18.441    2.874   1.00 30.15            N
ATOM    2506  C    GLN C3092        28.107 -16.944    5.764   1.00 24.73            C
ATOM    2507  O    GLN C3092        26.974 -16.472    5.637   1.00 24.71            O
ATOM    2508  N    ALA C3093        29.205 -16.310    5.343   1.00 23.94            N
ATOM    2509  CA   ALA C3093        29.160 -14.994    4.685   1.00 23.97            C
ATOM    2510  CB   ALA C3093        28.779 -13.909    5.706   1.00 23.95            C
ATOM    2511  C    ALA C3093        30.493 -14.618    4.009   1.00 23.83            C
ATOM    2512  O    ALA C3093        31.556 -15.008    4.472   1.00 23.82            O
ATOM    2513  N    PRO C3094        30.443 -13.841    2.910   1.00 24.15            N
ATOM    2514  CD   PRO C3094        29.221 -13.410    2.203   1.00 24.15            C
ATOM    2515  CA   PRO C3094        31.649 -13.414    2.177   1.00 24.68            C
ATOM    2516  CB   PRO C3094        31.098 -13.058    0.801   1.00 24.26            C
ATOM    2517  CG   PRO C3094        29.762 -12.461    1.144   1.00 24.90            C
ATOM    2518  C    PRO C3094        32.369 -12.231    2.840   1.00 24.92            C
ATOM    2519  O    PRO C3094        32.529 -11.165    2.239   1.00 25.65            O
ATOM    2520  N    PHE C3095        32.810 -12.437    4.076   1.00 25.08            N
ATOM    2521  CA   PHE C3095        33.495 -11.410    4.864   1.00 25.37            C
ATOM    2522  CB   PHE C3095        32.444 -10.502    5.521   1.00 24.79            C
ATOM    2523  CG   PHE C3095        33.015  -9.384    6.356   1.00 24.93            C
ATOM    2524  CD1  PHE C3095        33.652  -8.299    5.760   1.00 24.60            C
ATOM    2525  CD2  PHE C3095        32.883  -9.403    7.741   1.00 24.43            C
ATOM    2526  CE1  PHE C3095        34.148  -7.247    6.536   1.00 24.72            C
ATOM    2527  CE2  PHE C3095        33.374  -8.358    8.527   1.00 24.22            C
ATOM    2528  CZ   PHE C3095        34.008  -7.278    7.921   1.00 24.70            C
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ATOM   2529  C   PHE C3095      34.288 -12.163   5.928  1.00 25.61           C
ATOM   2530  O   PHE C3095      33.766 -13.101   6.537  1.00 26.06           O
ATOM   2531  N   SER C3096      35.538 -11.773   6.164  1.00 26.42           N
ATOM   2532  CA  SER C3096      36.343 -12.485   7.158  1.00 27.23           C
ATOM   2533  CB  SER C3096      37.709 -12.857   6.558  1.00 27.32           C
ATOM   2534  OG  SER C3096      38.389 -11.725   6.054  1.00 28.68           O
ATOM   2535  C   SER C3096      36.529 -11.795   8.515  1.00 27.58           C
ATOM   2536  O   SER C3096      37.311 -12.259   9.349  1.00 28.21           O
ATOM   2537  N   GLY C3097      35.807 -10.700   8.745  1.00 27.18           N
ATOM   2538  CA  GLY C3097      35.908 -10.003  10.021  1.00 26.33           C
ATOM   2539  C   GLY C3097      34.808 -10.462  10.971  1.00 26.17           C
ATOM   2540  O   GLY C3097      34.322 -11.584  10.845  1.00 25.72           O
ATOM   2541  N   LYS C3098      34.408  -9.610  11.916  1.00 25.25           N
ATOM   2542  CA  LYS C3098      33.347  -9.971  12.864  1.00 24.54           C
ATOM   2543  CB  LYS C3098      33.759  -9.591  14.289  1.00 25.96           C
ATOM   2544  CG  LYS C3098      35.059 -10.259  14.723  1.00 28.19           C
ATOM   2545  CD  LYS C3098      35.079 -10.576  16.208  1.00 29.56           C
ATOM   2546  CE  LYS C3098      35.022  -9.324  17.053  1.00 30.68           C
ATOM   2547  NZ  LYS C3098      35.150  -9.647  18.505  1.00 32.82           N
ATOM   2548  C   LYS C3098      32.013  -9.313  12.498  1.00 22.87           C
ATOM   2549  O   LYS C3098      31.984  -8.155  12.082  1.00 22.97           O
ATOM   2550  N   ILE C3099      30.919 -10.060  12.659  1.00 21.29           N
ATOM   2551  CA  ILE C3099      29.567  -9.589  12.316  1.00 19.46           C
ATOM   2552  CB  ILE C3099      28.918 -10.546  11.251  1.00 19.44           C
ATOM   2553  CG2 ILE C3099      27.577  -9.987  10.769  1.00 18.38           C
ATOM   2554  CG1 ILE C3099      29.869 -10.742  10.062  1.00 19.30           C
ATOM   2555  CD1 ILE C3099      29.447 -11.853   9.103  1.00 19.40           C
ATOM   2556  C   ILE C3099      28.632  -9.537  13.544  1.00 18.29           C
ATOM   2557  O   ILE C3099      28.381 -10.568  14.165  1.00 18.68           O
ATOM   2558  N   TRP C3100      28.109  -8.357  13.888  1.00 16.88           N
ATOM   2559  CA  TRP C3100      27.195  -8.233  15.036  1.00 15.59           C
ATOM   2560  CB  TRP C3100      27.643  -7.078  15.956  1.00 15.65           C
ATOM   2561  CG  TRP C3100      29.076  -7.231  16.505  1.00 15.70           C
ATOM   2562  CD2 TRP C3100      29.492  -8.034  17.626  1.00 15.13           C
ATOM   2563  CE2 TRP C3100      30.901  -7.910  17.735  1.00 15.28           C
ATOM   2564  CE3 TRP C3100      28.813  -8.846  18.547  1.00 16.40           C
ATOM   2565  CD1 TRP C3100      30.220  -6.668  15.997  1.00 15.61           C
ATOM   2566  NE1 TRP C3100      31.321  -7.074  16.734  1.00 15.83           N
ATOM   2567  CZ2 TRP C3100      31.639  -8.570  18.730  1.00 15.21           C
ATOM   2568  CZ3 TRP C3100      29.549  -9.504  19.538  1.00 15.48           C
ATOM   2569  CH2 TRP C3100      30.950  -9.358  19.618  1.00 15.73           C
ATOM   2570  C   TRP C3100      25.746  -8.022  14.533  1.00 15.44           C
ATOM   2571  O   TRP C3100      25.438  -6.991  13.924  1.00 14.84           O
ATOM   2572  N   LEU C3101      24.875  -9.003  14.800  1.00 14.06           N
ATOM   2573  CA  LEU C3101      23.469  -9.004  14.348  1.00 13.05           C
ATOM   2574  CB  LEU C3101      23.268 -10.161  13.357  1.00 13.07           C
ATOM   2575  CG  LEU C3101      21.828 -10.623  13.084  1.00 12.96           C
ATOM   2576  CD1 LEU C3101      21.208  -9.737  12.015  1.00 13.42           C
ATOM   2577  CD2 LEU C3101      21.821 -12.083  12.624  1.00 14.82           C
ATOM   2578  C   LEU C3101      22.382  -9.133  15.430  1.00 12.57           C
ATOM   2579  O   LEU C3101      22.597  -9.789  16.450  1.00 11.63           O
ATOM   2580  N   SER C3102      21.215  -8.525  15.181  1.00 12.95           N
ATOM   2581  CA  SER C3102      20.054  -8.615  16.092  1.00 13.03           C
ATOM   2582  CB  SER C3102      20.128  -7.536  17.187  1.00 13.35           C
ATOM   2583  OG  SER C3102      19.148  -7.749  18.205  1.00 12.78           O
ATOM   2584  C   SER C3102      18.736  -8.484  15.297  1.00 13.43           C
ATOM   2585  O   SER C3102      18.687  -7.747  14.298  1.00 13.38           O
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ATOM   2586  N   ILE C3103      17.687  -9.197  15.741  1.00 13.23           N
ATOM   2587  CA  ILE C3103      16.355  -9.215  15.082  1.00 14.65           C
ATOM   2588  CB  ILE C3103      16.135 -10.552  14.290  1.00 15.02           C
ATOM   2589  CG2 ILE C3103      14.776 -10.534  13.581  1.00 14.81           C
ATOM   2590  CG1 ILE C3103      17.254 -10.764  13.267  1.00 15.40           C
ATOM   2591  CD1 ILE C3103      17.113 -12.053  12.443  1.00 16.79           C
ATOM   2592  C   ILE C3103      15.180  -9.123  16.087  1.00 15.28           C
ATOM   2593  O   ILE C3103      15.239  -9.717  17.166  1.00 15.06           O
ATOM   2594  N   SER C3104      14.109  -8.414  15.726  1.00 16.55           N
ATOM   2595  CA  SER C3104      12.930  -8.295  16.614  1.00 17.82           C
ATOM   2596  CB  SER C3104      13.077  -7.067  17.527  1.00 18.38           C
ATOM   2597  OG  SER C3104      12.058  -7.028  18.524  1.00 18.13           O
ATOM   2598  C   SER C3104      11.629  -8.186  15.793  1.00 19.18           C
ATOM   2599  O   SER C3104      11.672  -7.850  14.608  1.00 18.60           O
ATOM   2600  N   HIS C3105      10.475  -8.466  16.405  1.00 21.28           N
ATOM   2601  CA  HIS C3105       9.209  -8.376  15.660  1.00 23.07           C
ATOM   2602  CB  HIS C3105       8.964  -9.664  14.877  1.00 24.36           C
ATOM   2603  CG  HIS C3105       8.715 -10.856  15.749  1.00 25.51           C
ATOM   2604  CD2 HIS C3105       7.631 -11.219  16.474  1.00 26.93           C
ATOM   2605  ND1 HIS C3105       9.673 -11.815  15.986  1.00 26.74           N
ATOM   2606  CE1 HIS C3105       9.192 -12.721  16.820  1.00 27.20           C
ATOM   2607  NE2 HIS C3105       7.955 -12.383  17.132  1.00 28.00           N
ATOM   2608  C   HIS C3105       7.927  -8.081  16.452  1.00 24.09           C
ATOM   2609  O   HIS C3105       7.913  -8.058  17.686  1.00 23.14           O
ATOM   2610  N   THR C3106       6.851  -7.870  15.692  1.00 25.15           N
ATOM   2611  CA  THR C3106       5.506  -7.616  16.212  1.00 26.55           C
ATOM   2612  CB  THR C3106       5.100  -6.137  16.097  1.00 26.80           C
ATOM   2613  OG1 THR C3106       5.097  -5.748  14.717  1.00 27.05           O
ATOM   2614  CG2 THR C3106       6.052  -5.258  16.880  1.00 27.26           C
ATOM   2615  C   THR C3106       4.549  -8.437  15.339  1.00 27.26           C
ATOM   2616  O   THR C3106       4.987  -9.196  14.477  1.00 26.93           O
ATOM   2617  N   ASP C3107       3.245  -8.287  15.539  1.00 28.56           N
ATOM   2618  CA  ASP C3107       2.310  -9.067  14.732  1.00 30.14           C
ATOM   2619  CB  ASP C3107       0.977  -9.243  15.474  1.00 32.49           C
ATOM   2620  CG  ASP C3107       0.498  -7.968  16.133  1.00 34.70           C
ATOM   2621  OD1 ASP C3107       0.406  -6.930  15.440  1.00 37.09           O
ATOM   2622  OD2 ASP C3107       0.209  -8.003  17.348  1.00 36.52           O
ATOM   2623  C   ASP C3107       2.065  -8.499  13.334  1.00 29.74           C
ATOM   2624  O   ASP C3107       1.264  -9.043  12.575  1.00 30.83           O
ATOM   2625  N   GLN C3108       2.762  -7.425  12.979  1.00 28.55           N
ATOM   2626  CA  GLN C3108       2.578  -6.815  11.665  1.00 27.66           C
ATOM   2627  CB  GLN C3108       1.942  -5.432  11.822  1.00 27.82           C
ATOM   2628  CG  GLN C3108       0.557  -5.445  12.466  1.00 28.58           C
ATOM   2629  CD  GLN C3108       0.012  -4.045  12.681  0.05 28.18           C
ATOM   2630  OE1 GLN C3108      -1.083  -3.866  13.214  0.05 28.21           O
ATOM   2631  NE2 GLN C3108       0.779  -3.043  12.266  0.05 28.20           N
ATOM   2632  C   GLN C3108       3.845  -6.693  10.812  1.00 26.77           C
ATOM   2633  O   GLN C3108       3.760  -6.652   9.582  1.00 25.82           O
ATOM   2634  N   PHE C3109       5.015  -6.625  11.449  1.00 25.68           N
ATOM   2635  CA  PHE C3109       6.268  -6.496  10.697  1.00 24.08           C
ATOM   2636  CB  PHE C3109       6.441  -5.039  10.221  1.00 25.01           C
ATOM   2637  CG  PHE C3109       6.572  -4.029  11.343  1.00 26.02           C
ATOM   2638  CD1 PHE C3109       7.763  -3.908  12.062  1.00 26.89           C
ATOM   2639  CD2 PHE C3109       5.505  -3.205  11.682  1:00 26.71           C
ATOM   2640  CE1 PHE C3109       7.889  -2.977  13.105  1.00 27.26           C
ATOM   2641  CE2 PHE C3109       5.616  -2.268  12.725  1.00 27.81           C
ATOM   2642  CZ  PHE C3109       6.811  -2.156  13.437  1.00 27.24           C
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ATOM   2643  C   PHE C3109       7.497  -6.950  11.497  1.00 22.66           C
ATOM   2644  O   PHE C3109       7.382  -7.267  12.681  1.00 21.87           O
ATOM   2645  N   VAL C3110       8.658  -6.992  10.833  1.00 20.94           N
ATOM   2646  CA  VAL C3110       9.932  -7.396  11.460  1.00 19.58           C
ATOM   2647  CB  VAL C3110      10.402  -8.790  10.931  1.00 20.14           C
ATOM   2648  CG1 VAL C3110      10.731  -8.705   9.443  1.00 20.40           C
ATOM   2649  CG2 VAL C3110      11.639  -9.268  11.707  1.00 21.57           C
ATOM   2650  C   VAL C3110      11.049  -6.374  11.162  1.00 18.29           C
ATOM   2651  O   VAL C3110      10.982  -5.675  10.154  1.00 16.70           O
ATOM   2652  N   THR C3111      12.065  -6.298  12.035  1.00 17.21           N
ATOM   2653  CA  THR C3111      13.210  -5.383  11.852  1.00 16.21           C
ATOM   2654  CB  THR C3111      13.109  -4.122  12.781  1.00 16.74           C
ATOM   2655  OG1 THR C3111      13.100  -4.528  14.159  1.00 19.56           O
ATOM   2656  CG2 THR C3111      11.851  -3.321  12.485  1.00 18.23           C
ATOM   2657  C   THR C3111      14.551  -6.096  12.159  1.00 15.10           C
ATOM   2658  O   THR C3111      14.575  -7.053  12.945  1.00 13.98           O
ATOM   2659  N   ALA C3112      15.643  -5.638  11.532  1.00 13.72           N
ATOM   2660  CA  ALA C3112      16.996  -6.210  11.737  1.00 14.06           C
ATOM   2661  CB  ALA C3112      17.266  -7.324  10.712  1.00 13.98           C
ATOM   2662  C   ALA C3112      18.092  -5.135  11.630  1.00 13.79           C
ATOM   2663  O   ALA C3112      17.936  -4.164  10.884  1.00 14.41           O
ATOM   2664  N   SER C3113      19.194  -5.320  12.364  1.00 13.18           N
ATOM   2665  CA  SER C3113      20.321  -4.369  12.395  1.00 12.99           C
ATOM   2666  CB  SER C3113      20.210  -3.510  13.665  1.00 12.64           C
ATOM   2667  OG  SER C3113      21.209  -2.499  13.724  1.00 12.28           O
ATOM   2668  C   SER C3113      21.690  -5.103  12.369  1.00 13.25           C
ATOM   2669  O   SER C3113      21.875  -6.075  13.097  1.00 12.44           O
ATOM   2670  N   VAL C3114      22.636  -4.611  11.555  1.00 13.63           N
ATOM   2671  CA  VAL C3114      23.972  -5.230  11.374  1.00 13.14           C
ATOM   2672  CB  VAL C3114      24.030  -5.984   9.989  1.00 12.86           C
ATOM   2673  CG1 VAL C3114      25.467  -6.425   9.641  1.00 13.59           C
ATOM   2674  CG2 VAL C3114      23.117  -7.194  10.016  1.00 13.11           C
ATOM   2675  C   VAL C3114      25.161  -4.248  11.419  1.00 13.18           C
ATOM   2676  O   VAL C3114      25.094  -3.171  10.834  1.00 11.64           O
ATOM   2677  N   ILE C3115      26.245  -4.631  12.101  1.00 14.05           N
ATOM   2678  CA  ILE C3115      27.463  -3.797  12.176  1.00 15.16           C
ATOM   2679  CB  ILE C3115      27.717  -3.208  13.593  1.00 15.92           C
ATOM   2680  CG2 ILE C3115      28.902  -2.217  13.532  1.00 16.68           C
ATOM   2681  CG1 ILE C3115      26.482  -2.477  14.122  1.00 15.85           C
ATOM   2682  CD1 ILE C3115      26.657  -1.949  15.549  1.00 15.56           C
ATOM   2683  C   ILE C3115      28.699  -4.655  11.836  1.00 16.02           C
ATOM   2684  O   ILE C3115      28.900  -5.714  12.444  1.00 14.67           O
ATOM   2685  N   LEU C3116      29.519  -4.195  10.883  1.00 16.42           N
ATOM   2686  CA  LEU C3116      30.741  -4.920  10.469  1.00 17.73           C
ATOM   2687  CB  LEU C3116      30.864  -4.910   8.939  1.00 17.22           C
ATOM   2688  CG  LEU C3116      29.646  -5.423   8.157  1.00 17.27           C
ATOM   2689  CD1 LEU C3116      29.914  -5.349   6.660  1.00 17.70           C
ATOM   2690  CD2 LEU C3116      29.339  -6.855   8.570  1.00 18.07           C
ATOM   2691  C   LEU C3116      32.016  -4.322  11.099  1.00 18.48           C
ATOM   2692  O   LEU C3116      32.185  -3.101  11.134  1.00 16.07           O
ATOM   2693  N   GLU C3117      32.926  -5.184  11.562  1.00 20.56           N
ATOM   2694  CA  GLU C3117      34.150  -4.718  12.227  1.00 23.53           C
ATOM   2695  CB  GLU C3117      33.939  -4.757  13.754  1.00 24.06           C
ATOM   2696  CG  GLU C3117      35.200  -4.587  14.608  1.00 24.76           C
ATOM   2697  CD  GLU C3117      34.952  -4.835  16.103  1.00 25.52           C
ATOM   2698  OE1 GLU C3117      34.507  -5.946  16.473  1.00 25.65           O
ATOM   2699  OE2 GLU C3117      35.203  -3.917  16.913  1.00 25.88           O
ATOM   2700  C   GLU C3117      35.429  -5.488  11.878  1.00 25.38           C
ATOM   2701  O   GLU C3117      35.403  -6.695  11.654  1.00 25.28           O
ATOM   2702  N   GLU C3118      36.545  -4.766  11.840  1.00 28.60           N
ATOM   2703  CA  GLU C3118      37.857  -5.346  11.559  1.00 32.23           C
ATOM   2704  CB  GLU C3118      38.321  -4.996  10.139  1.00 33.43           C
ATOM   2705  CG  GLU C3118      37.520  -5.678   9.038  1.00 35.47           C
ATOM   2706  CD  GLU C3118      38.123  -5.482   7.657  1.00 36.73           C
ATOM   2707  OE1 GLU C3118      37.561  -6.029   6.683  1.00 37.62           O
ATOM   2708  OE2 GLU C3118      39.156  -4.786   7.540  1.00 37.51           O
ATOM   2709  C   GLU C3118      38.857  -4.800  12.576  1.00 33.91           C
ATOM   2710  O   GLU C3118      39.168  -3.608  12.576  1.00 34.12           O
ATOM   2711  N   ASN C3119      39.348  -5.678  13.444  1.00 36.07           N
ATOM   2712  CA  ASN C3119      40.308  -5.298  14.477  1.00 37.92           C
ATOM   2713  CB  ASN C3119      40.307  -6.343  15.597  1.00 38.97           C
ATOM   2714  CG  ASN C3119      38.908  -6.622  16.137  1.00 39.98           C
ATOM   2715  OD1 ASN C3119      38.271  -5.753  16.737  1.00 40.51           O
ATOM   2716  ND2 ASN C3119      38.424  -7.841  15.919  1.00 40.65           N
ATOM   2717  C   ASN C3119      41.713  -5.169  13.889  1.00 38.71           C
ATOM   2718  O   ASN C3119      41.850  -5.354  12.662  1.00 39.38           O
ATOM   2719  OXT ASN C3119      42.661  -4.885  14.657  1.00 39.94           O
TER    2720      ASN C3119
ATOM   2721  O   HOH W5001       1.203   5.537   8.026  1.00 17.73           O
ATOM   2722  O   HOH W5002      14.815   9.909   2.322  1.00 14.32           O
ATOM   2723  O   HOH W5003      23.904   8.622  37.957  1.00 27.02           O
ATOM   2724  O   HOH W5004      20.469   3.444   3.735  1.00 17.55           O
ATOM   2725  O   HOH W5005      24.018   4.203  28.855  1.00 20.10           O
ATOM   2726  O   HOH W5006      10.973   5.376  28.684  1.00 19.79           O
ATOM   2727  O   HOH W5007      22.784  15.314  34.546  1.00 22.90           O
ATOM   2728  O   HOH W5008      23.453   4.929   3.777  1.00 19.63           O
ATOM   2729  O   HOH W5009      23.062   1.129   4.843  1.00 21.68           O
ATOM   2730  O   HOH W5010      25.642  18.163  37.608  1.00 19.94           O
ATOM   2731  O   HOH W5011      23.184   2.653   2.606  1.00 26.65           O
ATOM   2732  O   HOH W5012      28.019   0.947   5.252  1.00 22.66           O
ATOM   2733  O   HOH W5013       4.711  21.958   2.912  1.00 24.85           O
ATOM   2734  O   HOH W5014      36.483   3.458  10.706  1.00 31.97           O
ATOM   2735  O   HOH W5015      17.241   0.177  14.610  1.00 23.93           O
ATOM   2736  O   HOH W5016      13.566 -15.296  11.672  1.00 22.95           O
ATOM   2737  O   HOH W5017      19.479  14.186  -2.520  1.00 25.49           O
ATOM   2738  O   HOH W5018      27.283  10.084   6.422  1.00 24.49           O
ATOM   2739  O   HOH W5019      14.135   8.932  34.920  1.00 26.53           O
ATOM   2740  O   HOH W5020      36.044   2.408  16.583  1.00 32.56           O
ATOM   2741  O   HOH W5021      33.258 -17.363   3.678  1.00 19.73           O
ATOM   2742  O   HOH W5022      15.667  -0.884   2.725  1.00 31.95           O
ATOM   2743  O   HOH W5023       9.740  -0.876  42.696  1.00 26.45           O
ATOM   2744  O   HOH W5024      28.298 -24.311  26.736  1.00 36.28           O
ATOM   2745  O   HOH W5025      16.170   2.461  13.853  1.00 22.79           O
ATOM   2746  O   HOH W5026      13.623  -1.972  15.922  1.00 33.10           O
ATOM   2747  O   HOH W5027      35.568  -7.137  18.918  1.00 28.33           O
ATOM   2748  O   HOH W5028      21.193   8.337  22.471  1.00 24.39           O
ATOM   2749  O   HOH W5029       0.905   8.530   3.669  1.00 29.99           O
ATOM   2750  O   HOH W5030      26.791  21.664  30.504  1.00 26.91           O
ATOM   2751  O   HOH W5031      12.687  -4.279   3.191  1.00 33.49           O
ATOM   2752  O   HOH W5032      25.981   5.485  38.408  1.00 30.01           O
ATOM   2753  O   HOH W5033      18.351 -22.326  27.170  1.00 39.62           O
ATOM   2754  O   HOH W5034      27.692 -22.175  28.942  1.00 33.59           O
ATOM   2755  O   HOH W5035       7.766   9.184  29.149  1.00 37.38           O
ATOM   2756  O   HOH W5036      27.081   7.365   5.947  1.00 37.77           O
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ATOM   2757  O   HOH W5037      26.538  19.381  35.080  1.00 37.77             O
ATOM   2758  O   HOH W5038      -4.201  17.799   6.607  1.00 32.96             O
ATOM   2759  O   HOH W5039       5.036   8.700  14.260  1.00 30.11             O
ATOM   2760  O   HOH W5040       0.851   9.642  42.538  1.00 22.98             O
ATOM   2761  O   HOH W5041      19.927   0.231  15.198  1.00 20.70             O
ATOM   2762  O   HOH W5042      38.613  -9.206  13.685  1.00 46.18             O
ATOM   2763  O   HOH W5043      35.672 -15.638   5.122  1.00 43.16             O
ATOM   2764  O   HOH W5044      14.774  -8.966  39.562  1.00 27.43             O
ATOM   2765  O   HOH W5045      -0.343 -11.294   8.886  1.00 35.83             O
ATOM   2766  O   HOH W5046       0.384   7.133  40.132  1.00 36.11             O
ATOM   2767  O   HOH W5047      -1.790 -16.597  10.364  1.00 51.74             O
ATOM   2768  O   HOH W5048      17.913   8.434  22.684  1.00 19.14             O
ATOM   2769  O   HOH W5049      26.849   7.812  30.849  1.00 32.50             O
ATOM   2770  O   HOH W5050      31.682  10.495   7.280  1.00 43.96             O
ATOM   2771  O   HOH W5051      33.295   7.550  31.842  1.00 42.65             O
ATOM   2772  O   HOH W5052      26.726  22.667   9.308  1.00 42.17             O
ATOM   2773  O   HOH W5053      16.839   2.653  43.220  1.00 32.73             O
ATOM   2774  O   HOH W5054      28.300   3.705   0.074  1.00 31.84             O
ATOM   2775  O   HOH W5055      21.249  10.241  40.281  1.00 40.01             O
ATOM   2776  O   HOH W5056      18.910   0.164  43.189  1.00 35.91             O
ATOM   2777  O   HOH W5057      14.293  25.027   1.495  1.00 30.20             O
ATOM   2778  O   HOH W5058      15.432  -0.416  17.518  1.00 26.65             O
ATOM   2779  O   HOH W5059      21.028   5.383  41.219  1.00 31.60             O
ATOM   2780  O   HOH W5060      27.025   7.703  33.714  1.00 38.38             O
ATOM   2781  O   HOH W5061       1.162  -2.470  38.136  1.00 32.76             O
ATOM   2782  O   HOH W5062       7.118  -4.468   3.111  1.00 25.42             O
ATOM   2783  O   HOH W5063      10.345   8.046  50.558  1.00 21.47             O
ATOM   2784  O   HOH W5064       1.601  -6.957   7.392  1.00 19.01             O
ATOM   2785  O   HOH W5065       8.301   8.667  48.256  1.00 31.31             O
ATOM   2786  O   HOH W5066      13.857   7.152   1.988  1.00 29.65             O
ATOM   2787  O   HOH W5067      -8.101  -4.494  44.898  1.00 34.47             O
ATOM   2788  O   HOH W5068      31.896 -17.405   6.589  1.00 41.64             O
ATOM   2789  O   HOH W5069      17.654 -25.606  27.581  1.00 27.36             O
ATOM   2790  O   HOH W5070      23.222  14.650  26.416  1.00 26.05             O
ATOM   2791  O   HOH W5071       7.588  -0.528   0.314  1.00 32.42             O
ATOM   2792  O   HOH W5072      37.956 -17.275   4.444  1.00 27.98             O
ATOM   2793  O   HOH W5073      13.506 -13.814  28.837  1.00 53.93             O
ATOM   2794  O   HOH W5074      32.339   6.763   6.234  1.00 44.01             O
ATOM   2795  O   HOH W5075      17.732 -21.822  12.391  1.00 27.13             O
ATOM   2796  O   HOH W5076       2.962  14.623  32.943  1.00 35.34             O
ATOM   2797  O   HOH W5077      18.219 -11.144  17.921  1.00 32.13             O
ATOM   2798  O   HOH W5078      21.073  24.057  -0.096  1.00 34.29             O
ATOM   2799  O   HOH W5079      15.379 -12.595  24.369  1.00 37.81             O
ATOM   2800  O   HOH W5080      26.131  21.190   0.182  1.00 31.04             O
ATOM   2801  O   HOH W5081      -7.427  -1.162  30.153  1.00 37.22             O
ATOM   2802  O   HOH W5082       9.376  19.648  13.353  1.00 46.89             O
ATOM   2803  O   HOH W5083      26.771 -14.783  26.158  1.00 30.66             O
ATOM   2804  O   HOH W5085      24.158  -4.023  38.598  1.00 29.95             O
ATOM   2805  O   HOH W5086       2.673  -2.236  40.838  1.00 36.71             O
ATOM   2806  O   HOH W5087      14.901  15.719  31.793  1.00 66.05             O
ATOM   2807  O   HOH W5089       0.185   6.149   5.302  1.00 45.92             O
ATOM   2808  O   HOH W5090      -3.050  13.963   3.439  1.00 31.57             O
ATOM   2809  O   HOH W5091      20.002  26.238   4.307  1.00 38.95             O
ATOM   2810  O   HOH W5092       9.528   7.010  25.049  1.00 40.00             O
ATOM   2811  O   HOH W5093      22.998   9.245  25.495  1.00 45.96             O
ATOM   2812  O   HOH W5094      25.633   5.504  41.203  1.00 33.74             O
ATOM   2813  O   HOH W5095      22.525   7.413  40.125  1.00 27.93             O
ATOM   2814  O   HOH W5096      25.772  -0.812  38.637  1.00 43.16           O
ATOM   2815  O   HOH W5097       1.675   3.923  15.398  1.00 24.93           O
ATOM   2816  O   HOH W5098       3.426  25.166   2.688  1.00 33.60           O
ATOM   2817  O   HOH W5099       6.716  24.079   2.431  1.00 30.61           O
ATOM   2818  O   HOH W5100      13.776   2.826  15.316  1.00 35.09           O
ATOM   2819  O   HOH W5101       2.840  22.627   5.321  1.00 28.88           O
ATOM   2820  O   HOH W5102       4.306  26.695   0.803  1.00 45.75           O
ATOM   2821  O   HOH W5103      28.312   3.533  30.225  1.00 30.56           O
ATOM   2822  O   HOH W5104       7.296   5.105  45.493  1.00 44.55           O
ATOM   2823  O   HOH W5105       8.727  -7.822  20.152  1.00 30.96           O
ATOM   2824  O   HOH W5106      15.910   2.991   1.288  1.00 26.19           O
ATOM   2825  O   HOH W5107      24.692  15.648  32.485  1.00 45.46           O
ATOM   2826  O   HOH W5108      10.229  10.752  16.032  1.00 39.52           O
ATOM   2827  O   HOH W5109      30.124   8.492   1.194  1.00 42.53           O
ATOM   2828  O   HOH W5110      38.431   9.460  12.406  1.00 34.79           O
ATOM   2829  O   HOH W5111      15.296  -0.704  44.230  1.00 30.31           O
ATOM   2830  O   HOH W5112      22.219 -25.058   0.518  1.00 40.16           O
ATOM   2831  O   HOH W5113      16.280  -1.757  13.031  1.00 32.98           O
ATOM   2832  O   HOH W5114       7.672   5.118  50.500  1.00 42.44           O
ATOM   2833  O   HOH W5116      19.588  26.165   1.692  1.00 35.11           O
ATOM   2834  O   HOH W5117      29.689   0.468  33.170  1.00 50.63           O
ATOM   2835  O   HOH W5118      27.638  14.621  27.167  1.00 37.33           O
ATOM   2836  O   HOH W5119      25.674  24.122   6.832  1.00 44.26           O
ATOM   2837  O   HOH W5120      40.801 -13.288   5.322  1.00 31.98           O
ATOM   2838  O   HOH W5121      36.143  -1.829  16.148  1.00 41.24           O
ATOM   2839  O   HOH W5122       3.151   5.682  48.883  1.00 34.36           O
ATOM   2840  O   HOH W5123      32.693  14.445   9.290  1.00 34.74           O
ATOM   2841  O   HOH W5124      28.701   6.185  34.708  1.00 49.77           O
ATOM   2842  O   HOH W5125      26.196   1.517  -1.280  1.00 39.43           O
ATOM   2843  O   HOH W5126      -0.033   0.726  10.398  1.00 47.62           O
ATOM   2844  O   HOH W5127      21.383  -3.597  -1.922  1.00 51.56           O
ATOM   2845  O   HOH W5128      13.364  12.833  27.633  1.00 52.29           O
ATOM   2846  O   HOH W5129      21.714  12.615  35.721  1.00 33.09           O
ATOM   2847  O   HOH W5130       8.469   6.895  52.440  1.00 45.76           O
ATOM   2848  O   HOH W5131      26.110   4.660  30.832  1.00 35.30           O
ATOM   2849  O   HOH W5132      19.463 -23.363  14.165  1.00 35.76           O
ATOM   2850  O   HOH W5133      13.443  20.073  -9.252  1.00 40.04           O
ATOM   2851  O   HOH W5134       9.131   8.743  16.901  1.00 44.35           O
ATOM   2852  O   HOH W5135       2.141   8.144  15.984  1.00 43.82           O
ATOM   2853  O   HOH W5136       8.533  27.824   6.026  1.00 33.71           O
ATOM   2854  O   HOH W5137      23.489  23.402   0.284  1.00 47.94           O
ATOM   2855  O   HOH W5138      19.996  15.564  -7.451  1.00 42.23           O
ATOM   2856  O   HOH W5139       3.830   6.820  -6.454  1.00 43.70           O
ATOM   2857  O   HOH W5140      15.282  15.611  18.402  1.00 41.11           O
ATOM   2858  O   HOH W5141      17.265  26.061  11.713  1.00 39.14           O
ATOM   2859  O   HOH W5142      23.754   1.893  -2.493  1.00 45.81           O
ATOM   2860  O   HOH W5143      26.488   3.338   6.608  1.00 42.72           O
ATOM   2861  O   HOH W5144       6.963   4.729   1.634  1.00 33.11           O
ATOM   2862  O   HOH W5145      -0.293   3.358   3.517  1.00 47.82           O
ATOM   2863  O   HOH W5146      13.304   0.010  14.071  1.00 44.49           O
ATOM   2864  O   HOH W5147      14.485  -0.911  11.196  1.00 34.10           O
ATOM   2865  O   HOH W5148      38.684  -3.391  16.424  1.00 42.58           O
ATOM   2866  O   HOH W5149      -0.378  -3.887  41.179  1.00 39.92           O
ATOM   2867  O   HOH W5150      14.999  10.060  38.087  1.00 56.40           O
ATOM   2868  O   HOH W5151      27.440 -10.394  33.773  1.00 51.57           O
ATOM   2869  O   HOH W5152       9.035  -7.425   0.106  1.00 46.37           O
ATOM   2870  O   HOH W5153       5.110  -2.372   2.316  1.00 33.68           O
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ATOM   2871  O   HOH W5154      29.018 -14.387  13.400  1.00 40.14           O
ATOM   2872  O   HOH W5155       1.676  -2.447   9.577  1.00 41.85           O
ATOM   2873  O   HOH W5156      20.185  11.538  -6.635  1.00 37.49           O
ATOM   2874  O   HOH W5157      15.389 -28.857  26.962  1.00 41.90           O
ATOM   2875  O   HOH W5158      -6.106  19.784   6.635  1.00 36.72           O
ATOM   2876  O   HOH W5159       5.517  17.184  13.233  1.00 48.23           O
ATOM   2877  O   HOH W5160       5.076  15.020  11.985  1.00 45.45           O
ATOM   2878  O   HOH W5161       5.445  -7.849  27.659  1.00 39.11           O
ATOM   2879  O   HOH W5162      20.980  18.101  37.922  1.00 29.42           O
ATOM   2880  O   HOH W5163      16.748 -29.146   3.293  1.00 42.39           O
ATOM   2881  O   HOH W5164      30.770   4.871  31.188  1.00 43.36           O
ATOM   2882  O   HOH W5165       3.854  -8.929  29.337  1.00 54.81           O
ATOM   2883  O   HOH W5166      10.593  19.605  16.042  1.00 47.04           O
ATOM   2884  O   HOH W5167      42.095   8.840  19.150  1.00 49.61           O
ATOM   2885  O   HOH W5168       9.957  11.390  13.550  1.00 42.37           O
ATOM   2886  O   HOH W5169      -4.606  21.333   1.399  1.00 48.40           O
ATOM   2887  O   HOH W5170      11.695  29.342   6.480  1.00 58.15           O
ATOM   2888  O   HOH W5171      23.099  25.128   3.657  1.00 40.99           O
ATOM   2889  O   HOH W5172      23.505  24.766  -3.702  1.00 44.31           O
ATOM   2890  O   HOH W5173      14.447  17.461  20.573  1.00 40.93           O
ATOM   2891  O   HOH W5174      11.974  23.606  15.698  1.00 50.59           O
ATOM   2892  O   HOH W5175      33.868  19.345  11.374  1.00 39.71           O
ATOM   2893  O   HOH W5176       8.306  -9.142  31.222  1.00 42.33           O
ATOM   2894  O   HOH W5177      12.171  14.379  29.266  1.00 52.75           O
ATOM   2895  O   HOH W5178      29.974  -2.958  37.157  1.00 38.64           O
ATOM   2896  O   HOH W5179      30.177   1.102   3.621  1.00 43.39           O
ATOM   2897  O   HOH W5180      13.634   0.062   1.980  1.00 43.54           O
ATOM   2898  O   HOH W5181       9.893  10.792  25.719  1.00 35.63           O
ATOM   2899  O   HOH W5182      15.133  16.851  24.775  1.00 34.15           O
TER    2900      HOH W5182
ATOM   2901  N1A COE E4002      19.788 -13.382  22.863  1.00 37.66           N
ATOM   2902  C2A COE E4002      19.629 -12.509  21.832  1.00 37.59           C
ATOM   2903  N3A COE E4002      18.590 -12.603  20.980  1.00 37.39           N
ATOM   2904  C4A COE E4002      17.686 -13.627  21.196  1.00 37.85           C
ATOM   2905  C5A COE E4002      17.805 -14.571  22.262  1.00 38.04           C
ATOM   2906  C6A COE E4002      18.900 -14.393  23.079  1.00 38.11           C
ATOM   2907  N6A COE E4002      19.128 -15.221  24.120  1.00 38.32           N
ATOM   2908  N7A COE E4002      16.749 -15.454  22.198  1.00 38.10           N
ATOM   2909  C8A COE E4002      15.977 -15.090  21.125  1.00 38.02           C
ATOM   2910  N9A COE E4002      16.529 -13.990  20.508  1.00 38.30           N
ATOM   2911  C71 COE E4002      15.927 -13.354  19.309  1.00 38.56           C
ATOM   2912  C72 COE E4002      15.686 -14.244  18.059  1.00 38.64           C
ATOM   2913  O72 COE E4002      16.358 -13.703  16.916  1.00 37.72           O
ATOM   2914  C73 COE E4002      14.168 -14.225  17.883  1.00 39.06           C
ATOM   2915  O73 COE E4002      13.797 -14.451  16.455  1.00 38.84           O
ATOM   2916  P73 COE E4002      14.041 -15.822  15.721  1.00 39.24           P
ATOM   2917  O7A COE E4002      13.165 -15.826  14.433  1.00 39.04           O
ATOM   2918  O8A COE E4002      15.540 -15.939  15.325  1.00 39.12           O
ATOM   2919  O9A COE E4002      13.637 -17.009  16.646  1.00 39.35           O
ATOM   2920  C74 COE E4002      13.826 -12.831  18.392  1.00 39.77           C
ATOM   2921  O74 COE E4002      14.690 -12.631  19.516  1.00 39.23           O
ATOM   2922  C75 COE E4002      12.345 -12.657  18.817  1.00 40.70           C
ATOM   2923  O75 COE E4002      12.121 -11.261  19.226  1.00 42.75           O
ATOM   2924  P1A COE E4002      10.787 -10.752  19.901  1.00 43.64           P
ATOM   2925  O3A COE E4002       9.754 -11.915  20.051  1.00 43.83           O
ATOM   2926  O4A COE E4002      10.208  -9.595  19.036  1.00 44.05           O
ATOM   2927  O5A COE E4002      11.200 -10.230  21.306  1.00 43.87           O
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TER     2928        COE E4002
END

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